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ABSTRACT

Four issues of "ACTTive Technology" include major articles, editorials, suggested curriculum activities, reviews of software and educational media, early childhood and technology news items, and conference calendars. Major articles include: "Why Use a Switch or TouchWindow?" (Linda Robinson and Carol Schneider); "Teachers Identify Important Characteristics of Children's Software" (Letha Clark); "Software in the Early Childhood Curriculum" (Patricia Hutinger and Joyce Johanson); "Levels of Switch Progression with Suggested Macintosh Software" (Linda Robinson and Carol Schneider); "Armed and Ready: The Potential Power of the Technology Assessment Report for Families" (Linda Robinson); "Parents Share Perceptions of Effects of Computers in Preschool Classrooms" (Robert Farley Rippey); "How Five Preschool Children with Autism Responded to Computers" (Patricia Hutinger and Robert Rippey); and "Outreach Project Uses Technology To Develop, Enhance Emerging Literacy Skills." (Some articles contain references.) (DB)

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ACTTive TECHNOLOGY

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VOLUME 12, NUMBER 1

Winter 1997

Why Use a Switch or TouchWindow?

by Linda Robinson, Coordinator, and Carol Schneider, Early Childhood Computer Specialist, Project TTAP

An alternate input, such as switch or TouchWindow, can be beneficial to any young child, not just those who have physical disabilities. Many early childhood skills, such as attending, visual tracking, problem solving, and communication can be enhanced through switch or touch tablet use.

Switch Use

A switch provides a simple input for introducing the computer to young children. When selecting software for switch use, begin with a program containing simple graphics and sound with each press of the switch. The "Make It Sound" portion of *Switch Intro* (Jokus) is a good beginning program for switch use. With each switch press a picture of an object appears on the screen and the corresponding sound made by the object is heard. The sound is heard for the duration of the switch press.

Other programs which reinforce causality and beginning switch skills include *Bears at Play* (The Elaine Clark Center), *Creature Antics* (Laureate Learning), and *Press to Play - Animals* (Don Johnston). With storybook programs, such as *Storytime Tales* and *Circletime Tales* (Don Johnston), children can enjoy hearing a book read to them by pressing a switch to turn the pages in the story.

Besides offering a beginning method of input, the switch may also serve as a tool for communication and other functions throughout a child's life. The child may need to learn how to indicate needs or wants by using a switch to scan across an array of choices.

Children cannot be expected to know how to scan pictures or words with a switch without proper training. Through use of selected software a progression of switch skills can be taught. After achieving causality, the child will then learn that there is an appropriate time to press his switch, and that specific switch pressing will result in communication.

Many early childhood skills, such as attending, visual tracking, problem solving, and communication can be enhanced through switch or touch tablet use.

By starting with simple software programs, which at times seem like games, the child can master the skills needed to communicate with a device, such as the Liberator, or to do word processing functions through use of his switch.

Many simple activities can be designed to teach or reinforce these switch skills. Over the past several years the number of software programs designed to reinforce these skills has increased. Jokus switch programs, such as *Switch Intro*, *Hit 'n Time*, *aMAZEing Ways*, and *Toy Store* are good examples for the Macintosh computer. For those still using older Apple computers, Don Johnston's "Make It Series" and R.J. Cooper's programs are good software for progressive switch use.

In order to use a switch with the Macintosh computer, a switch interface is needed. The cost of a Macintosh Switch Interface from Don Johnston is \$135.00. To attach a switch interface to

the computer, while the computer is turned off, unplug the keyboard cable from the ADB port on the back of the computer. Plug one end of the switch interface cable into the ADB port on the back of the computer and plug the other end of the cable into the switch interface. Then plug the keyboard cable into the ADB port on the switch inter-

face. Once the switch interface is connected, it won't interfere with the traditional use of the computer.¹

When using a switch with a young child, stable placement should be established. Several staff members at Macomb Projects have found that using a switch holder² will assist the young child at the computer center. Young children quickly become distracted. They may tend to move the switch and cords. A switch holder provides space underneath for hiding cords, eliminating the distraction of playing with the cord, picking up the switch, or sliding it across the computer table. The child can then focus on the monitor and the activity.

TouchWindow Use

Another simple method of input for young children is the TouchWindow. With the Macintosh computer the TouchWindow takes the place of the

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From The Editors. . .

by Linda Robinson

How would you rate your technology competencies these days? Well, here's a quick quiz to test your awareness level. You are presented with the following situation. You have a computer in your classroom and one of your children is just three years old with some fine motor delays. The child does not have good hand control at this time and her hand-eye coordination is poor. She likes to watch the other children use the computer, but seems to get frustrated with her lack of mouse skills. Someone always seems to help her move the mouse, although she doesn't really ask for their help.

You would like for her to be able to use the computer independently like the other children do. So what do you do? **a.** Let her figure out the mouse on her own, since most children eventually learn how to use it; **b.** Find an alternate method of input for her; **c.** Don't worry about her time on the computer, since she's probably too young to use it anyway.

If your answer was **a.**, you probably have chosen the solution most classroom teachers and personnel use. It's true that many children learn to use the mouse through their own determination and eventually they are able to use it confidently. Many skills are enhanced through mouse use, such as hand-eye coordination, attending, and problem solving, to name a few. So this answer is not wrong; however it may not be the most appropriate answer for this particular child who already has fine motor delays. She may lose interest in the computer due to her frustration with moving the mouse. All of the wonderful incidental learning that takes place with software and computer activities may have been minimal for this child

due to the fact that she spend most of her time and energy on getting the mouse to a certain point on the screen.

If you chose **b.** as your answer, you are on the right track to assessing this child's individual needs. Although she may someday be able to use a mouse, she may benefit more from using a simpler method of input at this time. Our feature article in this issue focuses on the whys and hows of using a switch or TouchWindow. Some children with physical disabilities are obvious candidates for switch use, while those children whose physical needs for a switch aren't so apparent often get overlooked. Yet they too could benefit from switch use while they are still young; however, they struggle along using the same input as the other children in the classroom. Adding a simple switch and appropriate software to the computer environment may help to equalize opportunities for all children. We've provided a sample curriculum activity which focuses on switch use.

If you chose answer **c.**, then you really need to come to Macomb for the Early Childhood Technology Conference. You're missing all the wonderful benefits technology offers for children, even the very young. If you can't attend the conference you may want to check out one or more of the Web sites listed in this issue for more information. Also if you are looking for local resources on technology, your state assistive technology person may be included on the list we have provided here.

Whatever your situation the bottom line is that *all children deserve the opportunity to get the maximum benefits of technology.* We owe it to them to keep searching until we find the right answer.

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mouse so young children can activate a program by pressing on the screen or moving their finger across the surface and then pressing on a hot spot in the program. For the younger children, software should be selected which is activated by a touch in a large area or even one touch anywhere on the screen. *McGee* (Lawrence Productions) is an example of a program which requires a press in one of four large boxes at the bottom of the screen. If the child presses anywhere else on the screen nothing happens. Programs, such as *BabyROM*, a CD-ROM, were developed to provide children large activation areas on the screen to explore by touching on the TouchWindow or activating a mouse. As children become more accustomed to using the TouchWindow, they can begin to use programs which offer a variety of activation areas on each screen, such as *Just Grandma and Me*, *Stellaluna*, *Green Eggs and Ham*, or other Living Books software.

Other good early childhood programs which work well with the TouchWindow include *Millie's Math House* (Edmark), *Thinkin' Things* (Edmark), *Pippi* (Ahead Media AB), and *Workshop* (Ahead Media AB). This is by no means a complete listing of software or CD-ROM programs for young children. However the software listed here has been successfully integrated into classrooms with children with disabilities at Macomb Projects' sites during the past year. The teachers' and children's responses were great! A variety of activities can be developed around any of the recommended programs.

The TouchWindow for the Macintosh is available from Don Johnston or other resources for approximately \$335.00. The TouchWindow is attached to the computer much like the switch interface. While the computer is turned off, plug the jack end of the TouchWindow

Y-cable into the ADB port. Plug the keyboard cable into the other end of the Y-cable. Turn the computer on and mount the TouchWindow screen to the monitor with velcro strips. The first time the TouchWindow is attached, TouchWindow Driver software will need to be installed on the hard drive. After this is installed the TouchWindow can then be calibrated. Once installed and mounted, as with the switch interface, the TouchWindow won't interfere with the traditional use of the computer.³

Whatever input method is used, technology can be a tool for increasing attending and communication skills and helping develop a variety of early childhood skills. Young children benefit from the consistent use of the equipment as a tool. The computer and software provide children the environment for acquiring early concepts and gaining confidence in communication and cognitive skills. By providing young children the opportunity to perform at their full potential now through simple input methods, such as the switch or TouchWindow, they become prepared for future use of the computer as a tool.

¹ *MacCessories: A Guide to Peripheral Devices for the Macintosh*, Macomb Projects, revised 1997.

² Schneider, Carol. A customized switch holder for switch placement on a child's wheelchair tray. *ACTTion News*, Spring, 1991.

³ *MacCessories: A Guide to Peripheral Devices for the Macintosh*, Macomb Projects, revised 1997.

Software referred to in the preceding article can be purchased from one of the following resources:

Creative Communicating, 801/645-7737
Don Johnston Inc., 800/999-4660
Educational Resources, 800/624-2926

TouchWindow® is a registered trademark of Edmark® Corporation.

Lear's Poems, Line Drawings Come Alive on Nonsense CD-ROM

One hundred fifty years ago, Edward Lear published his *Book of Nonsense*. Lear, now considered one of the most well-loved children's poets of all time was also a multi-faceted artist whose simple line drawings suggest movement and beg to come alive. Come alive they have in MAXIMA New Media's recent multimedia CD-ROM, *Edward Lear's Book of Nonsense*, containing animated interpretations of Lear's limericks and an audio-track CD with original music and narration.

Meet such Lear characters as the Fizzgiggious Fish, who dances to classical jazz; the Nutritious Newt, who steals his granddaughter's plum pudding; and the Meritorious Mouse, who plays a merry minuet on the piano-forte. *Edward Lear's Book of Nonsense* was recently awarded the Bronze Apple award from the National Educational Media Network.

Edward Lear's Book of Nonsense is the first of MAXIMA New Media's *The Animated Artist* series. The CD-ROM sells for \$18.95. Order by calling 800/231-3070.

For more information call MAXIMA New Media's sales department at 212/439-4177, write them at 2472 Broadway, Suite 195, New York, NY 10025; or fax 212/439-4178; e-mail info@maxnm.com or visit the web site at <http://www.maxnm.com/>

Laureate's new edition of *Sequential Software for Language Intervention and Development* contains a chapter outlining software recommendations for specific populations. The book is free from Laureate. Call 800/562-6801 or e-mail Laureate@LLSys.com.

Software Resources on the Internet

A+ Discount Software

<http://www.aplusbooks.com/software.html>

Offers discount pricing on software from major publishers

Children's Software

<http://www.nerdworld.com/nw429.html>

Lists sites that offer children's software and/or reviews of children's software

Children's Software and More!

<http://www.gamesdomain.ru/tigger>

Offers shareware and freeware for Macintosh and PC, freeware from Disney, demos of commercial products, reviews, graphics, and programming for kids

Children's Software Archives

<http://qv3pluto.leidenuniv.nl/steve/reviews/archives.htm>

Provides a list of Internet archive sites that include children's software

Children's Software Archives

<http://qv3pluto.leidenuniv.nl/steve/reviews/garbo.htm>

Provides resources for public domain and shareware

Children's Software on the Internet

<http://ois.lemuria.com/martin/chidr.htm>

Provides links to and descriptions of children's software sites on the Internet

Children's Software Review-All Star List

<http://microweb.com/pepsite/Revue/allstar.html>

Lists top choices of educational software by age group and subject

Creative Wonders

<http://www.cwonders.com/>

Gives descriptions and ordering information for CD-ROMs for home and school

Family Surfboard

<http://www.familysurf.com/depot.htm>

Features software reviews and demos

Lawrence Getz's Shareware for Children

<http://pages.prodigy.com/VDJW65A/>

Offers shareware for MS Windows

Kids Connection

<http://kidsconnection.com/computers/software/sfchil.html>

Offers information about children's software

Kids First

<http://www.cybersuperstores.com/kidsfirst/cover.html>

Lists CD-ROMs that are endorsed by the Coalition for Quality Children's Media

Kids Korner Wiz Kids

<http://www.wizkids.com/dshults>
Teaches parents, teachers, and kids about the Internet

Kids Shareware PC

<http://www.gamesdomain.com/tigger/pc/pc-sites.html>

Offers PC shareware to download

Look Out World

<http://www.lookoutworld.com/>

Offers free demos of the company's early childhood software

Mac Downloads 4 Kids

<http://gamesdomain.com/tigger/sw-mac.html>

Offers shareware and freeware for the Macintosh plus reviews and demos

Maplehurst Productions

<http://www.maplehurst.com/>

Features children's software on CD-ROM and free activities to download

Media-Pro

<http://www.widdl.com/MediaPro/>

Describes two CD-ROMs in the Magic Carpet series

Newsweek's Parents' Guide to Children's Software

<http://www.newsweekparentsguide.com/>
Contains over 600 software reviews

Planet Fun

<http://www.davd.com/fun.html>

Features previews and downloadable samples

Random House Children's CD-ROMs

<http://www.cyberstores.com/rh/cover.html>

Gives descriptions and ordering information for Living Books, Humongous Entertainment, and Knowledge Adventure CD-ROMs

Software Publishers Marketplace

<http://www.spmarket.com/spm/spmcat.html>

Provides a catalog of software titles produced by independent software developers

The Children's Software Company

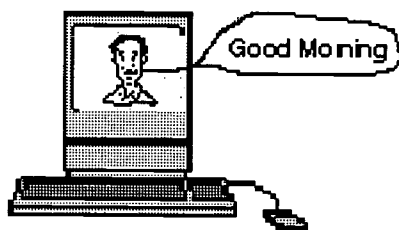
<http://www2.childsoft.com/childsoft>
Offers on-line software guide, catalog, and programs at discount prices



Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from the revised *Building ACTTive Futures: ACTT's Curriculum Guide to Young Children and Technology*.

Exploring Communication: Letters and E-mail



KidDesk is a desktop program that allows young children to launch a chosen software program easily without adult assistance. When set-up properly, *KidDesk* will keep young children out of any adult program and desktop not selected for their use. This program will allow young children to explore, experiment, make choices, and take risks in the computer environment. They can also experience different methods of communicating with one another, such as through e-mail and voice mail.

Materials

- Macintosh or MS DOS computer with color monitor
- Color printer
- KidDesk* (Edmark)

Ahead of Time

Personalize *KidDesk* for each child in the classroom in one of two ways, either through selection of an icon by the child or by inserting the child's photo. To use a photo, capture the child's picture by 1) scanning the photo 2) using a QuickCam or 3) using a QuickTake Camera. Import the child's photo into his/her desktop. If none of the above applications are available for capturing the child's photo, have the children draw a photo of themselves in a graphics program (*Kid Pix/ClarisWorks*) and save as a "PICT". Import the PICT into each child's desktop. Personalize each desktop with a welcome message.

Organize a field trip to the local post office or arrange for the children to talk to the mail, UPS, or Federal Express person. If a mail vehicle delivers on a regular basis to the school, arrange for the children to tour the vehicle while it is on school grounds. Talk with the children about how they receive letters or cards at home and how they send cards or letters to grandma and grandpa or someone else who may live far away.

Computer Activity

Install *KidDesk* onto the classroom computer. Customize a desktop for each child.

With the assistance of a teacher/facilitator/parent have each child create an e-mail message to other children in the

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classroom. When children click on the mailbox from their desktop, they enable the e-mail portion of *KidDesk*. From here they can then read, print, or delete their mail from their desktop. During free play, children can check the computer for their voice mail and/or written correspondence from the other children.

Related Activity

The children can make Post Office hats and bags. Create big mail boxes from cardboard boxes in the room for children to mail the letters they have created on the computer.

During circle time, gather the children to the computer center. Open *KidDesk* and select the "Calendar." Click to view the calendar for the current month. Ask the children what the weather is like outside. In the Day Box, type the children's response. On the calendar day, select an icon to correspond to the weather (sunny, snowing, raining). At the end of the week or month, print out the calendar and talk about how many days were sunny, snowing, raining, etc.

Compose "Thank You's" and other timely messages, such as Valentines or Christmas greetings on the computer and send out to family and friends or to classmates within the classroom.

Curriculum Integration Ideas

Create a post office from large cardboard boxes. Cut out a door way and several windows. Let the children paint/mark the post office. From smaller boxes create small mailboxes for each child with each child's name labeled clearly on the box. Set up the cardboard post office to allow the children's natural curiosity to prompt language and dramatic play and to engage their imagination, and to encourage talk about what a post office is and how they can use their new classroom post office.

After the field trip to the post office, encourage the children to talk about what they saw during the trip. Ask questions such as: How do you create a letter? Can you create one on the computer? How do you mail the letter? How do you send voice mail? How do you receive voice mail?

- Children can pretend to be postal workers and drive child-size trucks to deliver mail to friends in class.
- Use the computer to create icon labels representing a delivery/mail truck. Tape them to children's tricycles.
- Relate postal truck to other community delivery vehicles, such as food or fuel delivery truck.
- Play with other types of service vehicle toys, such as police car or fire truck.

Summary

With their own personal desktop design and options, children can become independent at the computer. They can send written and verbal messages to friends in the class as they learn that the computer is another tool for communication. Emergent literacy skills are promoted through the integration of this desktop program with various postal activities.

Dates Set for Spring, Summer TTAP Training

Dates have been set for the spring and summer TTAP (Technology Team Assessment Process) training sessions, hosted by Macomb Projects and held on the Western Illinois University campus in Macomb.

Each of the sessions is three days long. The first begins April 23 and ends on the 25th. The summer sessions will be held from June 4 -6.

During training, participants learn about an assessment model based on a team approach. Among the topics

are selecting equipment and software for the assessment; evaluating position and placement of the equipment; determining input method and curriculum applications. Sites are encouraged to send as many members of their assessment team as possible.

Participants receive hands-on experience with the process by working as a team to plan and assess a young child's technology needs.

Linda Robinson, TTAP Coordinator, is taking applications from persons

interested in participating in the training. Sites agreeing to replicate the TTAP assessment model are not charged a fee for the training.

For more information about the training or about the requirements for replication sites, contact Linda Robinson; 27 Horrabin Hall, 1 University Circle, Western Illinois University, Macomb, IL 61455; 309/298-1634 (phone), 309/298-2305 (fax), L_Robinson@wiu.edu (e-mail).

Two New Accessories Marketed for Action Voice-2A

Ability Research, Inc. manufactures and markets assistive technology devices including the portable ActionVoice-2A, an electronic voice recorder with true *prompted* auditory scanning. Two new accessories are now available for the ActionVoice-2A. The AbilitySpeaker enables the auditory scanning user to hear his or her prompts

privately through a separate small pillow speaker. The selected messages are then played through a separate external speaker, making the system quite useful for the classroom.

A keyguard accessory is also available. The keyguard fits all ActionVoice models and enhances the success of direct selection users. All ActionVoice models have two unique switch closure outputs which can be synchronized with each of the 10 to 18 messages for animated control of toys or adapted appliances. Units have scanning, switch, and keypad access and are priced at \$399-\$595.

Call Ability Research for a catalog and product information at 612/939-0121 or visit the web site at <http://www.skypoint.com/~ability/>

Profiles Interviews Offer Insights from Developers, Teachers, Researchers

Profiles in Computing, presented by the Family Surfboard (<http://www.familysurf.com/profile.htm>), is a web page that profiles the people behind the scenes of software development and of successful computer companies as well as those who implement technology programs in schools or conduct research on computers and their effects on young children. A recent interview with Sally Narodick, the CEO of Edmark Corporation, was posted on the page. Narodick, who discussed the role parents should play in their children's computing says children become "computer literate" when they begin to use the computer as a tool.

Narodick recommended five types of software for establishing a well-rounded software library: 1) software that helps children practice basic skills, 2) software designed to facilitate writing and creativity, 3) software that challenges higher-order thinking skills, 4) games and simulations that encourage strategy development, and 5) reference software and tools for exploring the on-line world. Steve Bennett, the article's author, stresses that it is important to select developmentally appropriate titles.

New Publication's Focus Is Family Computing

Family Circle's premiere issue of *Computers Made Easy* by the editors of *PC World* hit the newstands in January. The issue included articles on troubleshooting, guides to software, hardware, and the Internet, numbers for toll-free hotlines, and a list of the 8 best family computers.

The magazine is not a monthly. Editors tell us that the next issue is likely to be available around April 22, followed by another in November.

Macomb Projects staff have been impressed with the information in the publication and encourage you to watch for the April issue.

The address for *Computers Made Easy* is P.O. Box 9013, Rockville Centre, NY 11571-9013.

Software Resources on the Internet continued from page 4

Totware—Benjamin's Favorites
<http://www.het.brown.edu/people/mende/totware.html>
Lists and describes various Mac and PC shareware and freeware programs

Wierenga Software
<http://www.novagate.com/~wierenga/index.html>
Features educational shareware to download

Zia's Software Page
<http://www.zia.com/kids/games/ksoftware.htm>
Offers shareware and freeware plus links to other children's software sites

Ziff Davis Software Library
<http://www.hotfiles.com/educate.html>
Rates shareware and offers software demos that can be downloaded

Also check out:
10 Tips to Buying Children's Software
<http://www.kidsource.com/kidsource/software/tips.html>

Buyer's Guide to Great Children's Software on a Budget
<http://www.kidsware.com/budgetguide.html>

Children's Software Revue
<http://www.childrenssoftware.com>
This site contains many links to articles printed in previous issues of the Children's Software Revue publication.

Guide to Best Software for Kids
<http://www.kidsource.com/kidsource/software/Guide.html>

*Information is continually being added to Internet sites. We suggest a search using "children's software" to find more information.

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Enjoy, Create Art on the Internet

There are many art sites on the Internet. Some galleries have works by the Masters and other artists exhibit their own work. There are even some sites devoted to children's art. Here are two sites to keep for your reference to see what children around the world are creating. Kidz Art is located at <http://userpages.aug.com/starr/>. The Children's Art Gallery can be found at <http://redfrog.norconnect.no/~cag/>. Both sites accept art work to add to their exhibits.

How about getting your children's work on the Net? Each site gives instructions for how to submit artwork. Another method is to create your own Web Page.

Celeste, a 5-year old has a Kid Pix Slide Show on the Net. She is located at <http://www.vivanet.com/~schepps/celeste/>. Take a look at her show, you'll enjoy it and maybe come up with some ideas for your children!

IntelliTools Training Conference Slated for Early August

IntelliTools is sponsoring a training conference on August 3-5, 1997 in the San Francisco Bay area. Topics for the training include IntelliTools product training, early learning, and language arts. There will labs for both Macintosh and Windows, as well as break out sessions and guest speakers.

The conference fee is \$250, which includes breakfasts and lunches. The hotel rates for the conference are \$66/night double occupancy and \$130/night single occupancy.

Interested persons should contact IntelliTools for more information at 415/382-5959; fax 415/382-5950.

Company Provides Valuable Resources in AT Survival Kit

The *AT Survival Kit*, a product of DREAMMS for Kids, Inc., is a valuable resource for those needing information about funding, acquiring, and using computers and assistive technologies for home or school.

Among the information in the kit, you will find a one-year subscription to *DIRECTIONS: Technology in Special Education*, a publication of DREAMMS for Kids, as well as electronic copies of the last 22 issues of the publication; a copy of DREAMMS for Kids' *Building Bridges: Assistive Technology Seminar Proceedings*; a collection of articles and literature about assistive technology from over 40 agencies; and product resource information from 30 vendors.

The *AT Survival Kit* costs \$59.95. Call 607/539-3027. The company also has a web page at <http://www.dreamms.org/>

Computers, More Available through Follet Exchange Program

Follet Educational Services has an innovative program, the Product Exchange Program, for helping schools obtain technology and other educational materials. Follet's program allows schools to exchange unwanted textbooks for points (one point for each dollar the book is worth) toward merchandise. Points can be accumulated or used immediately. Computers, audio-visual equipment, and sports equipment are among the items that can be "purchased" with points. Schools may also opt to use Follet's traditional program and receive cash for their used texts.

Call Follet Educational Services at 800/621-4272 for more information.

NCIP Videos Support Learning through Assistive Technology

NCIP (National Center to Improve Practice) offers five video profiles illustrating how students with disabilities use assistive devices to improve learning.

- *Welcome to My Preschool! Communicating with Technology*
- *Multimedia and More: Help for Students with Learning Disabilities*
- *Jeff with Expression: Writing with Word Prediction Software*
- *Telling Tales in ASL & English: Reading, Writing, and Videotapes*
- *"Write" Tools for Angie: Technology for Students who are Visually Impaired*

Each video is about 10 minutes long and is accompanied by supporting print materials that can be used in workshops and training sessions. Print materials can be photocopied for dissemination. The videos are \$29.99 each. The set of five costs \$119.99.

Contact NCIP, P.O. Box 1020, Sewickley, PA 15143-1020; 800/793-5076.

NICHCY (National Information Center for Children and Youth with Disabilities) has the following new inclusion bibliographies available:

- *Educating Children and Youth with Disabilities: What Do the Laws Say?*
- *Educating Students with Attention/Deficit/Hyperactivity Disorder*
- *Educating Students with Learning Disabilities*

Most of the publications can be accessed through the NICHCY web page. The address is <http://www.aed.org/nichy> or call 800/695-0285 for a publications catalog.

ISTE Guide Offers Help for Schools Developing Technology Plans

Does your school need help gaining support and raising funds for integrating technology into the curriculum? If so, *The Education Technology Promotion Guide* provides step-by-step information for reaching all the stakeholders: parents, educators, school board members, community members, businesses, and the media.

The Education Technology Promotion Guide comes with a CD-ROM which includes a database and wordprocessed documents available in both Macintosh and DOS/Windows platforms. The database includes information about free and low-cost materials which will support technology

awareness efforts. Templates and worksheets are also included.

The Education Technology Promotion Guide and CD-ROM can be ordered from the International Society for Technology Integration (ISTE), 800/336-5191; fax 541/346-5890. Cost is \$9.00 plus \$4.50 shipping and handling.

Have you seen Macomb Projects' Web page?

Visit us at
www.mprojects.wiu.edu

Software Review

Newsletter Targets AT Developments

Directions: Technology in Special Education is a monthly newsletter published by DREAMMS for Kids, a non-profit parent and professional service agency specializing in assistive technology related research, development, and information dissemination.

The publication is designed to help readers stay current on the rapid changes in assistive technology and instructional computer technology. Topics include funding devices, selecting software, augmentative communication, technology and inclusion, legislation, and more. The newsletter is published each month except July. A subscription is \$14.95.

For more information contact DREAMMS for Kids, 273 Ringwood Road, Freeville, NY 13068-9618; 607/539-3027. Visit <http://www.dreamms.org/> for information about other products and services.

Toys 'R' Us Releases Guide to Selecting Toys for Children with Disabilities

A new edition of *Toy Guide for Differently-Abled Kids*, disseminated by Toys "R" Us, was released prior to Christmas. The guide contains a wide variety of toys for children of all ages. Each toy in the catalog meets the standard set by the U.S. Consumer Products Safety Commission. Each has been tested by children with disabilities as well as professionals.

The National Parent Network on Disabilities has more information about the guide. Call 703/684-6763.

Stellaluna Destined to be Classroom Favorite

by Carol Schneider, Technology Curriculum Specialist, Interactive Technology Literacy Curriculum Project

A favorite CD-ROM among the preschool children in the Literacy Project is *Stellaluna* (Broderbund). This is a story about a baby bat who becomes separated from her mother. Alone she seeks shelter in the nest of baby birds and they quickly become friends, in spite of their differences. This CD-ROM can be played on any home or car audio CD player or any CD-ROM audio-playing utility supplied with your computer's CD-ROM drive. Music includes the following songs: *Stellaluna's Dance*, *Lullaby*, *Upside Down*, *Bat Pride*, *Reunion*, and *Friendship*.

As with the other Living Books Series, this CD allows one to select *Read to Me* or *Let Me Play* mode with *A Bat Quiz* that has three levels. The *Bat Quiz* requires reading. When the teacher

begins to read the story to the children and discovers there isn't time to finish the story that day, the next day this CD-ROM will allow the teacher to go to the page where she had stopped and continue the story.

A wonderful CD-ROM for young children to explore and interact with the characters and environment, *Stellaluna* can be installed for the Macintosh or Windows. It requires 4.5 MB RAM.

Great off-computer materials for the classroom include a book, doll, or puppet. The cost of the hard cover *Stellaluna* (Janell Cannon) Random/House book is \$15.00 and the doll and/or puppet can be purchased from Word Almanac Education, 15355 Neo Parkway Cleveland, Ohio 44128-3147; 800/321-1147; Fax: 800/321-1149. The doll is \$10.98 and the puppet is \$16.49.

Software Review

Picture This Song

by Amy Betz, Art Curriculum Specialist, Expressive Arts Project

Can you paint a song? Well, with Morton Subotnick's *Making Music*, you can! Using a format similar to some children's draw and paint programs, *Making Music* lets children draw their own musical compositions. This portion of the program is appropriate for preschoolers through adults. Instruments that the children can choose include piano, organ, flute, clarinet, voices, horn, trumpet, marimba, bird tweet, tom tom, Domback, crystal, steel drum, violin, and banjo. More than one instrument can be used in the song. Children have the option to play the music faster or slower, louder or softer, and even backwards or upside down!

Other portions of the program are for older children. They include Building Blocks, Mix and Match, Melody and Rhythm Maker, and Games. Building Blocks shows how songs are similar to sentences in that they have a begin-

ning, middle, and end and they can be rearranged. Some of the songs used in this section are "Twinkle, Twinkle", and "Mary Had a Little Lamb." Unlike other programs, children do not have to put the song in correct order, they can experiment with the songs. Mix and Match lets children explore melodies and rhythms as well as how they sound on different instruments. In the Games section, children choose from Same or Different, Find the Same, Name That Difference, and Make a Game. All of the games target listening skills. If a wrong choice is made, a child says, "Oh well, try again."

Making Music provides on screen help at anytime. It has an overview section that discusses each program. One drawback is that the overview tends to crash on a PowerPc.

Making Music is published by Voyager.

Mouse Control for Little Hands

Designed for Windows and MS-DOS-based systems, Microsoft EasyBall is a large, stationary mouse which offers better control for little hands. Check out this innovative tool for youngsters at <http://www.microsoft.com/catalog>.

A free activity book, Microsoft EasyBall Presents the ABCs of Computer Fun, is also available. It includes tips for parents and teachers as well as fun things for kids to do. Write MDS Box T, 307 West 36th Street, New York, NY 10018.

Here's another good Web site for teachers:

www.encarta.msn.com/schoolhouse/

Software That's Free (or Nearly Free)

by Joyce Johanson, Coordinator, Macomb Projects

You've heard about public domain software and shareware before. Lately you may have heard about freeware. What's the difference between these three types of programs and how does that difference affect your pocketbook?

Public domain software and freeware don't have to be purchased. If you find a public domain or freeware program you like, you can copy it and give it to a friend. Public domain programs are not copyrighted, so if you want to modify them you can. Also, public domain programs can be copied and sold, usually for a small fee for the disk and time involved in copying and distributing.

Freeware is copyrighted. It cannot be modified, and while you can give the freeware away, you cannot sell it.

Shareware is used on a trial basis. You are allowed to use it for a while, but if you like it and want to continue using it, you are honor bound to pay the author. Shareware comes with information about where and when to send payment (usually small—between \$5.00 and \$30.00 for most shareware). You may copy shareware and share it with friends, but they also are expected to send payment if they want to keep using the program.

The Internet is a great place to find shareware, public domain, and freeware. Two popular (and fairly safe spots from which to download software) are <http://shareware.com> and <http://download.com>

Both sites have an amazing amount of choices in all types of categories, including education, games, and utilities. Just remember, anytime you download software from Internet, be on the safe side and run a virus check.

Early Childhood Technology Conference in March

March 21 is the date for the 1997 Technology Conference sponsored by Macomb Projects. Participants will attend sessions about ways computers and assistive technologies can be integrated into the curriculum and equalize opportunities for children with disabilities. Presentations, hands-on workshops, software preview labs, and round-table discussions are among the activities planned. Companies have donated software, switches, and books as door prizes.

Interested persons should contact Macomb Projects' STARNET for a registration form. Registration is limited. Call 309/298-1634 or fax your request to STARNET, 309/298-2305.

Teachers Identify Important Characteristics of Children's Software

by Letha Clark, Coordinator, Technology Assessment Software Package

For the past year, Macomb Projects staff members have conducted the "Software Olympics," an informal software evaluation with teachers and parents at Early Childhood and technology conferences and workshops.

Parents, classroom teachers, and other adults, when given the rare opportunity to compare software programs, seem to agree on "best" titles for young children. During the Software Olympics, participants viewed or compared two software titles. The titles had similar themes, such as drawing, story building, fables, music, math concepts, and animation.

During the comparison, participants created their own handout, writing favorable and unfavorable comments about each title as it was presented. The presenters made objective comments about the software, not including their personal evaluation of the software in the presentation. Questions about the titles were fielded during the presentation, insuring that the audience had as much information as possible before forming an opinion. The participants were then asked to "vote" on the title that they thought had the most appeal for young children. Following the outcome, the participants shared the reasons why one title was selected over the other. And the presenters, if asked, added their impressions of each program.

It is no surprise that the reasons given to support their choices are very similar. Flash and dazzle isn't what appealed to the individuals in the sessions. They were impressed with programs that looked easy for children to use. They wanted titles that allowed

children the opportunity to explore and create.

Results

In every session, *Kid Pix* was the overwhelming favorite when compared to another drawing and slide show program. The other program had similar options, but rather than being arranged in icon based menus, the options were chosen from an artist's studio.

Storybook Weaver Deluxe was chosen because of its variety of characters, the ease with which they could be added, and the simplicity of the method for adding text. When they compared titles that incorporated music, *Gus and the Cyberbuds*, *Sing*, *Play & Paint-A-Long*

Millie's Math House was the "hands down favorite," in the math category. Adults were impressed that it presented a variety of math concepts in a fun, non-threatening fashion. They could see children exploring on their own, especially since there were no right or wrong answers. They appreciated the potential for many related activities away from the computer.

The two fables presented had few differences. Both titles compared were interactive books and had a number of hot spots on each "page" that contributed to the story being told. The wait time between pages seemed to be a deciding factor for some and for others

Repeatedly, the adults indicated they wanted features in software for young children such as ease of use, screens that show a "room" containing options rather than a tidy menu that might require reading skills, scenes that were appealing to the eye, activities that were challenging without being overwhelming, and opportunities for children to explore and create on their own.

was the choice by a narrow margin. The deciding factor for participants was that it simply seemed easier to use. Adding music was a one step process and they liked that.

Most people who work with young children recognize that children like things that move. A comparison of titles that make animation easy for young children resulted in the selection *Amazing Animation* because the animation was easy to produce and the decision making process is uncomplicated and easy for even a young child.

the option for languages other than English for print and narration was important. As it turned out, the adults preferred *The Tortoise and the Hare*.

Repeatedly, the adults indicated they wanted features in software for young children such as ease of use, screens that show a "room" containing options rather than a tidy menu that might require reading skills, scenes that were appealing to the eye, activities that were challenging without being overwhelming, and opportunities for children to explore and create on their own.



Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from the revised *Building ACTTive Futures: ACTT's Curriculum Guide for Young Children and Technology*.



An adapted activity using a big book, stuffed toys, and a simple switch provides children with severe disabilities a means of achieving developmental skills, such as communication, beginning scanning skills, fine motor, and cognition.

Materials

For Macintosh Computer:

Macintosh computer with color monitor

New Frog & Fly (Simtech Publications)

Switch Input Box

Switch

Jump, Frog, Jump (big book version) by Robert Kalan, Mulberry Paperback Book, NY

Display board made from foam core board (20" X 16") and Tempo material

Toy stuffed frog and a fly with male velcro attached to the backs

Toy frogs for each child in the group

Brightly colored yarn

Ahead of Time

Create a display board from foam core board with a low pile material such as "Tempo"¹ glued to the board. Let it dry. If unable to locate a stuffed frog or fly create one from leftover Tempo material. Attach male velcro to the back of the stuffed frog and fly.

If the switch input box is not attached to the computer, connect the input box and switch. Boot the software program. Arrange the computer center so that all children can gather around the computer monitor. If having the computer on will distract the children, place a sheet or computer cover on the monitor. When ready to use, simply remove the cover.

Gather the children in the reading center. Give each child a toy frog. Read the big book *Jump, Frog, Jump* (Kalan) to the children. Encourage them to manipulate the toy while the story is being read.

After the story, ask each child to find the frog on the display board and pick or pull the frog from the board. If the child is physically able, ask him to place the frog above or below the fly. Talk about why a frog would catch a fly and how. To take it a step further, use the brightly colored yarn to show how the frog's tongue would catch the fly.

continued on page 14

Frog & Fly continued from page 13

Computer Activity

Bring the children to the computer center. If the monitor is covered, take off the computer cover or sheet. Activate the switch to demonstrate to the children how the program operates. Follow the horizontal movement of the object with your finger until it is partially across the screen, then press the switch again to stop the fly. Describe what you are doing as you demonstrate each step to the child. When using *New Frog and Fly*, follow the movement downward with your finger as the fly drops quickly vertically.

Encourage the children to take turns pressing the switch to start the action, while watching the monitor, then to press the switch again when they see the object appear at the top of the screen. Verbally reinforce the child as she presses the switch by describing what she is doing. As children take turns, see if they can catch or (tickle) the fly with the frog's tongue. If some children are unable to do this, encourage modeling from the other children.

Tell a child who is having difficulty pressing the switch at the appropriate time that he can start the program whenever he is ready. Explain that he is to stop the fly before it moves across the screen so that the frog can eat. If the child misses pressing his switch, encourage him to press his switch to bring the fly back. The fly's movement will slow down after a switch press is missed.

The child may initially press the switch constantly without realizing his own control of the action on the monitor. Demonstration of pressing the switch at the appropriate time along with physical assistance may be needed. When the child begins to realize his switch presses are causing something to happen, switch pressing should become more intentional.

Related Activity

To reinforce visual tracking and eye-hand coordination, play a game such as the following with a stuffed frog or fly or puppet. Hide a puppet out of the child's visual field and place a toy or object in front of the child within arm's reach. Ask the child to watch for the puppet to appear, then to give the puppet the object before he disappears. Move the puppet slowly across the child's visual field and out of view at the other side. Encourage the child to pick up the object and give it to the puppet before it is gone. As the child gains coordination, the puppet's movements can become progressively faster.

A child at the beginning level can practice switch pressing by being put "in charge" of stopping and starting various classroom activities by pressing his switch. The switch can be connected to a bell or battery operated tape player to make more noise or music so the other children can hear the signals better.

Other Activities

Activities could be designed around other parts of the *New Frog & Fly* to encourage cognitive and switch pressing skills. "Feed the Frog" reinforces causality concepts with the frog catching the fly with each switch press. "Trap the Fly 1" and "Trap the Fly 2" reinforce appropriate switch pressing and beginning scanning skills.

Curriculum Integration Ideas

Sounds:

- Listen for animal sounds in the school or home environment
- Listen to a tape of animal sounds
- Pick out sounds from the animal video
- Listen for animal sounds on the field trip to the pond

Pond:

- Create a pond environment so that children can explore the movements of frogs on water
- Add other objects and creatures to the pond
- Take a field trip to a local pond to observe the frogs

Animal Behaviors:

- Imitate how various animals move in their environment
- Explore what animals eat and how they obtain their food
- Explore the simplicity and speed of their movements
- Relate their motions to human movements

Summary

Many activities can be designed around an updated version of the popular *Frog & Fly* program. For Apple users these activities can be done with the Apple Public Domain Program, *Frog & Fly*, a switch input box, and a switch. No matter what computer system is used, this timeless program can help children develop a variety of skills.

¹ Tempo Material. Lockfast, Inc., 10904 Deerfield Road, P.O. Box 42488, Cincinnati, Ohio 45242. 800/543-7157.

MINDPLAY Miniatures

MindPlay offer "miniatures," programs designed especially for students with multiple disabilities. Each miniature is a program designed especially for learning a single skill.

The miniatures contain clear, simple graphics, with minimal activity on each screen. Text is oversized so it is easier to see and identify. The sound and speech in the programs are minimal; they are engaging but not overwhelming to students.

The company offers four of the miniatures, each for either Mac or Windows (3.1). Each program sells for \$9.99. Site licenses are available. Some programs are available in both English and Spanish. A free 8-page newsletter containing information on using technology in the inclusion classroom comes with each order.

For more information, call MindPlay at 800/221-7911.

Reader Survey

The article on page 12 summarizes results of the software evaluations conducted by Macomb Projects. Now here's *your* chance to answer two questions and perhaps win a prize.

1. What features do you look for in early childhood software?
2. What software features have you noticed that children seem to prefer?

Mail your responses to Macomb Projects, 27 Horrabin Hall, WIU, Macomb, IL 61455, ATTN: Joyce.

Responses received by April 30 will be entered in a random drawing. Results will be printed in the Spring or Summer issue of *ACTTive Technology*.

Calendar of Conferences

March 17-19, 1997: 17th Annual Microcomputers in Education Conference in Tempe, AZ. Contact Barbara Ford, 602/965-7363.

March 17-21, 1997: Strategies for Success in the New Millennium: Expanding the Possibilities in Developmental Disabilities, 18th Annual International Conference on MR/DD in New York City. Contact YAI National Institute for People with Disabilities, 460 West 34th Street, New York, NY 10001.

March 18-22, 1997: Technology and Persons with Disabilities, 12th Annual

Conference in Los Angeles. Call 818/677-2578.

March 21, 1997: Early Childhood Technology Conference in Macomb, IL. Contact STARNET, 309/298-1634 or 800/227-7537.

April 1-5, 1997: Society for Information Technology and Teacher Education in Orlando, FL. Contact 804/973-3987.

July 8-12, 1997: ConnSENSE '97 in Windsor Locks, CT. Contact Chauncy Rucker, 860/486-0165.

Supporting Classroom Diversity

Sleeping Cub's Test of Courage A Native American Folktale

by Letha Clark, Coordinator, Technology Assessment Software Package

ACTTive Technology provides this column as a regular feature for helping teachers use technology to expand their curricula to include cultural awareness and diversity.

Sleeping Cub, an orphan, is considered a foolish boy by other members of his tribe. More than anything else, he wants to accomplish a great deed as a brave warrior for his people. As the buffalo herds begin to disappear, Sleeping Cub watches his tribe struggle for survival. Not allowed to help from within, Sleeping Cub sets out on his own journey with his dog Two Spot, to save his people. Unknown to Sleeping Cub, his magical friend Raven Girl joins the adventure. Dangers are encountered and challenges overcome as the trio demonstrates great courage

helping others. Sleeping Cub's reward is the secret that saves his people.

The buffalo were important in the lives of the Native Americans of the Great Plains. Meat, hides, and bones were all used to support life. As young children discover this and other information about what was important to the Native Americans of the Great Plains, they expand what they know about other cultures.

Sleeping Cub's Test of Courage, by Davidson, is an interactive folktale available on CD-ROM bundled with 2 additional CD-ROM titles for \$55.

Illinois Resource for Free Computers

The Hands Foundation in Monmouth, IL makes refurbished computers available at no cost to Illinois residents (of any age) with disabilities. The Hands Foundation is a not-for-profit organization. More information is available by calling Wendell Steivers at 309/734-5211.

ACTTive Technology Subscription Form

Name _____

Agency _____

Street Address _____

City _____ State _____ Zip _____

For a year's subscription to *ACTTive Technology*, complete this form and return it with a purchase order or check for \$16.00 to Macomb Projects, 27 Horrabin Hall, Western Illinois University, Macomb, IL 61455.

Orders from outside the U.S. must be paid for in U.S. funds drawn from U.S. banks.



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Software in the Early Childhood Curriculum

by Patricia Hutinger and Joyce Johanson

Software catalogs are true "wish books." Each software description sounds so appealing, and whenever a new catalog arrives in the mail, a teacher's list of "gotta haves" grows longer. At the same time, funds limit the number of software programs you can purchase, so you must decide which programs will give the most for the money.

Fortunately, like story books and other preschool materials, software has a variety of classroom uses. While software can be used to introduce a new curricular topic to the children, it can also expand a curricular theme. The Figure on page 14 shows examples of selected curricular themes and software that can be used to supplement or introduce the theme.

Software plays many roles in the early childhood curriculum. It supports concepts and develops skills (e.g., literacy or problem solving). Some software may help children understand other cultures (*Imo and the King* [African] or *Liam Finds a Song* [Irish]) while other software allows children to explore characters and situations in their favorite books. Useful software titles contain several activities that can be used for varying purposes to meet different children's needs. For example, *Thinkin' Things* contains comparison and problem solving activities, pattern and sequence activities, as well as creative activities and activities to develop critical thinking skills.

Off-computer activities complement the information the software presents.

Characters, activities, themes, and concepts introduced in software can be expanded to encourage knowledge and skill transfer and generalization to other areas. Macomb Projects' demonstration and research site classrooms' teachers have created many curriculum integration ideas based on children's software. Potentially interesting and inviting software-related and integrated learning activities are endless and varied, requiring nothing more than a child's suggestion or an adult's imagination. For instance, when children used *Thinkin' Things* and became enamored by its Fripplle Shop, the teacher helped the class make its own Fripplle Store. At first the children made Fripplles in the art center out of lunch-sized paper sacks

decorated with paint, yarn, glitter, and other materials. Next, they set up a Fripplle Store of their own in a large cardboard box in the dramatic play area where they pretended to be clerks, phone message takers, and buyers and sellers. Children played games such as Guess Which Fripplle ("I see a Fripplle with black hair and blue and pink stripes."). By changing the words to familiar songs (e.g., *How Much is That Fripplle in the Window?*), the teacher made up "Fripplle Songs" and the children enjoyed singing them.

Using the "snapshot" computer capability to reproduce computer screens, teachers may print screens to make classroom books, puzzles, and games.

continued on page 15

Can Technology Really Help My Child?

by Linda Robinson and Carol Schneider, Project TTAP

"Can technology really help?" is a question often asked by early intervention personnel and parents of young children with disabilities. The answer can be found through a technology assessment in which family members, therapists, teachers and assistants, a school psychologist, and child development computer specialists make decisions as a team about technology considerations for an individual child.

The technology assessment is a process which begins with a referral and continues through follow-up services. Macomb Projects' Project TTAP: Technology Team Assessment Process has established procedures for

the process before, during and after the assessment.

Procedures Prior to Assessment

Part of the pre-assessment process is gathering background information on the child. This includes completion by the family of a form developed by Project TTAP which provides personal data, diagnosis and medical information, the reason for the assessment, information on the child's behaviors, the child's physical status, communication abilities, seating requirements, and previous experience with switch-operated toys and computer equipment. In addition to this

continued on page 3

From The Editors. . .

by Linda Robinson

No one said it would be easy, especially if you have to start from scratch with technology. First, getting funds to purchase a computer, then figuring out what software to use with it. Add to those problems the dilemma of what an individual child may need to gain skills like his preschool peers. It is not easy, but there are solutions. And we hope to move you closer to finding those solutions with information on fund raising, software evaluation and technology assessment in this issue.

Starting with the equipment we recommend you find someone like our preschool teacher from Jacksonville, Illinois, whom we have described in the article about raising money for technology. She started with local organizations and businesses and didn't stop until she had everything she needed for the children in her classroom. As a matter of fact she probably hasn't stopped her fund raising yet. With new updates of equipment models and software, seeking funds can be a never-ending quest. She is quite an inspiration for all of us. We need that tremendous drive to go after what we want and what we know we need for the children we serve. If you are this type of person or if you can find someone like her in your area, you have it made.

Once you've gotten over that first hurdle of acquiring equipment, then you're ready to move on to the next challenge, figuring out what software you need. There are so many possibilities and so little money. You definitely want to be sure to get the most for your money. Our cover story and the chart on curriculum themes and recommended programs may be helpful to you. Even if you've had a computer for awhile, this list of suggested software may provide some answers as to what new software to purchase during this

coming year. This might also give you ideas for ways to organize and use your existing software.

So you have the equipment and software, but what about that four-year-old child who doesn't seem to be able to use the same input method as the other children, or who doesn't respond to the software you have? This is where a technology assessment conducted by a team which includes family, teacher and other support personnel comes into play.

To answer the question of whether technology can help a particular child, we have provided information on our assessment process in the first of two articles on this subject. In the next issue we will include excerpts from a technology assessment report to give you an example of how recommendations are determined and written up. A well-written report can benefit the staff, family and, of course, the child, by providing information on technology and the possible applications. Also our newly updated "Levels of Switch Progression" in this issue may be useful in selecting switch software for that child.

No, planning for technology is not easy, but knowing where to look for answers makes it a little less difficult. The availability of information on the Internet makes even the search for answers an enjoyable experience. Check out the Macomb Projects World Wide Web site, www.mprojects.wiu.edu, for articles and other pieces of information from the Macomb Projects staff.

If you're going to be at Closing the Gap this Fall, visit our booth in the exhibit hall. We may be able to answer your questions there. Or you can call or write to us. We are always available as a resource for information and training. Difficulties are lessened when you know you are not alone.

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form, TTAP staff request copies of pertinent information, such as evaluation reports and the IEP or IFSP. Also the family and/or teacher is asked to provide a short videotape which shows the child's normal activities either at home or at school or both places, if possible. Viewing the videotape and reviewing the background information is an important part of the assessment planning process.

Once all the information is received, team members may meet to discuss goals and an agenda for the assessment. Decisions about software and any necessary equipment adaptations are made at this meeting. Changes in the plans may be made on the day of the assessment after discussion with other team members.

A room with ample space for equipment, adaptive seating, conference table and chairs, and, if possible, a play area, is chosen for the assessment. Videotape equipment is set up in a position with minimal distraction for the child. Videotape is an essential means of record keeping for team members. A review of the tape later may reveal behaviors or abilities not apparent during actual observation of the assessment. Videotape is also a valuable record from which to write an accurate evaluation report. A conference area is important for meeting with team members before the assessment, as well as at the end of the day's session. A play area in or near the assessment room is essential so that the child can take breaks and return to the task within a short period of time. The younger the child is, the more breaks may be needed.

Assessment Day Arrives

So all the arrangements are made and the assessment day finally arrives! After the child is introduced to all team members, and made comfortable in the new surroundings, he/she may be taken for a walk around the building or to the playground to relax. It is at this time that

the team members meet to discuss the goals for the assessment and to plan the agenda for the session. The meeting time is limited to 20 minutes so that the child does not get too tired before the actual assessment begins.

The first steps taken during the assessment concern the child's positioning and the placement of equipment. Depending on the child and the amount of adaptations needed, decisions on these factors may take a long time. Child positioning and equipment placement are considerations which are constantly re-assessed during the session as different switches or other adaptive devices are used with the child.

Decisions on what software to use during the assessment are based on a number of factors, including what input method is used, the child's cognitive level, and the child's interests. As an example, we will use the case of four-year-old Steven whose mother and teacher say that he likes music and different sounds, but they are not sure whether he knows he is starting his tape recorder when he presses his switch. He is very physically limited in his ability to use his hands, and his only means of communication is an inconsistent utterance or look with his eyes.

Where to Begin

Initially our main goal is to assess Steven's understanding of causality concepts through simple programs which react to any switch press. Therefore we start with a program, such as *Switch Intro* (Don Johnston). One part of this program is "Make It Sound" which focuses on sounds and related pictures on the monitor. After positioning and placement of the switch, we observe Steven's actions. We look first at his interest in making an effort to reach toward the switch, and his physical ability to press on it. When he does activate the switch, we observe his reactions, any facial or verbal responses to the sounds, and his visual

attending to the monitor. If he makes no attempt to activate the switch, physical assistance is provided once or twice to get him started. At this point, a determination may be made that the placement or type of switch needs to be changed. These are variables which are assessed on an ongoing basis throughout the session.

Let's assume Steven is able to press his switch and does so randomly to make the sounds change in the program. Then the next step would be to assess his ability to press the switch at an appropriate time. This skill is needed in order to advance to functional use of communication through scanning. It also indicates to us that he is able to control his movements in order to get the desired result. *Press to Play - Animals* (Don Johnston) is one program which can be used to test appropriate switch pressing or train a child to develop this skill. This is a simple way to test or teach appropriate switch pressing skills.

If it is determined that Steven does have an understanding of waiting and pressing his switch at a specific time, then the next step is to test more specifically his ability to attend to the monitor and visually track an object across the screen. A simple program which can be used to assess this skill is the "Willy the Worm" portion of *Switch Intro*. This program can be used to assess the child's ability to visually track the object and to press his switch appropriately. The requirement of starting the object movement with a switch press each time is similar to the action which is needed to control a scanning array, one press to start the scanning, another press to stop at the desired word or letter. With an auditory beep added to the initial switch press, this program can be used to assess beginning auditory scanning, as well as visual scanning skills.

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Illinois Exchange Network Offers Technology Equipment

The Illinois' Assistive Technology Exchange Network (ATEN) offers a valuable service to special education teachers and students with disabilities in Illinois' schools through its technology equipment exchange and technical assistance programs.

ATEN has three major activities: 1) maintaining a database of special education assistive technology devices so schools can exchange, loan, sell, or donate equipment they no longer use; 2) providing technical assistance through a peer-to-peer network of educators experienced with a specific AT device or disability; and 3) to encourage businesses to donate used computers, peripherals, alternative input devices, and communication devices that can be distributed to schools. Donated equipment is cleaned and refurbished as necessary before distribution.

A partial list of items that have been donated for redistribution to schools includes computers (IBM and compatible, Apple IIe and IIGS, and Macintosh), printers, modems, hard drives, 3.5 disk drives, CD-ROM drives, peripheral, software, audio-visual equipment, communication devices, and a variety of switches and keyguards.

Equipment may be requested for use by students with disabilities or by special education teachers/administrators.

Further information is available by contacting Pam Ross at 312/626-2836 or 800/476-2836. The mailing address is ATEN, c/o Arthur Rubloff Center, 4540 W. Washington Blvd., Chicago, IL 60624.

Databases of devices and technical assistants are available on the ISBE homepage (www.isbe.state.il.us/homepage.html). When you get to the ISBE page, just click the ATEN icon.

Children with Disabilities Use New Creative Drawing Tool and Computer for Art

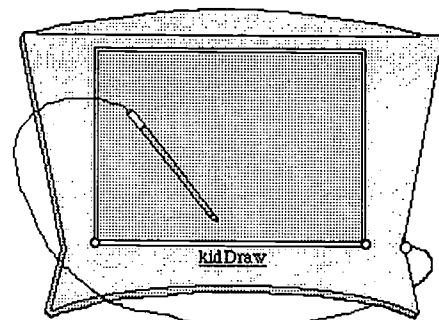
by Judy Potter, Expressive Arts Project

Turn your computer into a classroom creativity center with *kidDraw*TM, a computer drawing pad made for children. *kidDraw* is an especially useful tool for children with disabilities who cannot use other drawing tools easily.

At the computer, children are able to paint, sketch, or trace using *kidDraw*, with greater accuracy and ease than if they used a mouse. The drawing area is 6 x 8 inches with a transparent overlay and the resolution is 1270 lines per inch, speed 65 PPS (Mac).

kidDraw includes a child-sized pressure sensitive stylus. The harder the child presses, the thicker the lines appear. The corded stylus can be connected to either side of the draw tablet. Whenever you move the stylus near the surface of the art pad, the cursor follows on the screen. The stylus has the natural feel of drawing with a crayon or marker. The Dycem-type backing on the draw tablet keeps the tablet from scooting around on a child's lap or wheel chair tray.

In one of the Expressive Arts field test classrooms, a screen dump of the *Kid Pix* draw screen was created and placed under the transparent overlay sheet to correspond with the draw program the children were using. A child with mul-



multiple disabilities who could not manage controlling a mouse was very successful holding the small stylus and creating his artwork with *kidDraw*TM.

*kidDraw*TM comes with either *Adobe Art Explore* CD for Macs or Davidson's *Kid Works* for PCs. *kidDraw*TM supports all applications including *Kid Pix*TM, *HyperStudio*, and *Adobe Photoshop*. *kidDraw*TM drawings and paintings can be saved, printed, and shared with family and friends.

Grade level: All

System requirements: Mac—Sys. 7+ or higher, ADB support; Win—3.1 or 95, VGA

Manufacturer: *kidBoard*TM
(toll free 800/926-3066)

Price: from \$119.00 to \$129.95 (depending on the distributor)

Phone Bills Yield \$ for School Computers

You no longer need to feel guilty for spending hours on the phone and tons of money on long distance calls. Your long distance conversations can provide funds for a new computer for your school. Imagine: you can help your school get a FREE computer simply by talking on the telephone!

A+ America and Sprint have created a program to enhance education. New

and current Sprint customers who register for the program are able to donate a percentage of their long distance bill to the school of their choice. The school receives a credit for the donation, and the credits can be used to purchase a computer.

People interested in learning more about the program should call 800/233-6080 for information.



Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from the *Interactive Technology Literacy Curriculum (ITLC)* currently being developed at Macomb Projects.

Construction with *Big Job*

Construction is part of everyone's life, children and adults alike. Road construction is an ongoing activity no matter where one may live. A child may observe road construction on the way to school, to grandparents house, or while on a family trip. Building construction is also an everyday occurrence. Children may see a house (maybe their own being remodeled, rooms being added onto a school, or a new fast food restaurant being built down the street.

Big Job allows children to experience construction from the inside out. They can drive a big rig, build a large machine, and watch large equipment working in a video. With *Big Job*, children can view large construction vehicles up close instead of from a distance.

Materials:

- Macintosh Centris computer or later with CD-ROM drive
- *Big Job* software by the Discovery Channel, Discovery Communications, Inc.
- Display in the library corner any books about big rigs, farming, and fire rescue

Introductory Activity:

- Create a bulletin board named "Road Construction." Draw roads and buildings. Add pictures or photos of large equipment and construction workers plus various materials used for building. Place on the bulletin board. Discuss in circle time each aspect of road construction, naming the various equipment and materials and talking about what construction workers do.
- Read *Heavy Equipment* by Jan Adkins and use the bulletin board described above for discussing construction equipment and building.

Computer Activity:

- Children can view and interact with *Big Job* software individually or in small groups during center time.
- You might ask the children some of the following questions as they view the program: How are roads built? What materials are used for building roads? What big equipment have you seen? How do you make a big machine go? Do you know anyone who works at a construction site?

Extended Activity:

- Let children talk about what they would like to construct. Place *Busytown* and *How Things Work in Busytown* on the computer as choices. Children can use the programs to build houses and buildings.
- Gather a variety of construction toys and have children discuss what each might do at a construction site. Children can use props (blocks, sand, water, dirt, sticks, etc.) to demonstrate how the equipment would

continued on pages 8

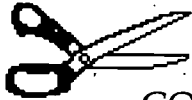
BIG JOB

CURRICULUM INTEGRATION IDEAS



COOKING/SNACKS

- Pack sandwiches in lunch boxes or paper sacks
- Pour drinks from thermos or Igloo cooler
- Eat trucks made from cream cheese, peanut butter, celery, and carrot rounds



CONSTRUCTION

- Build sandwich to eat
- Construct edible trucks
- Make toolboxes from shoe boxes
- Design and build cardboard vehicles
- Design steering wheels



ART

- Place a mural paper on the sidewalk outside. Drive riding toys through tempera paint and then ride on the paper
- Paint with sandbox toys on large paper
- Paint with different size building blocks



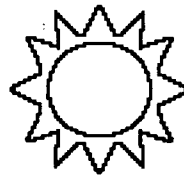
SENSORY

- Add rocks, sand, or dirt in the water and/or sand table and put in small equipment



SCIENCE/MATH

- Count or measure wheels on various toy trucks
- Make a weigh station with a scale and weigh different toy trucks
- Use a bathroom scale and weigh created big equipment



OUTDOOR PLAY/MOTOR

- Wash toy trucks in the truck wash
- Pound nails into scrap lumber with a hammer
- Ride on large toys and make big equipment using cardboard boxes
- Play with shovels and buckets



RELATED BOOK, POEMS

- *Bam Bam Bam* by E. Merriam
- *Girders and Cranes* by L. Balterman
- *Up Goes the Sky Scraper!* by G. Gibbons
- *Who Built the Highway?* by N. Bate
- *Road Closed* by Michael Kehue
- *Monster Road Builders* by A. Royston
- *Construction Giants* by R. Olney



GROUP/INDIVIDUAL STORY EXPERIENCES



- Share individual experiences related to big vehicles and construction

BIG JOB

CURRICULUM INTEGRATION IDEAS (continued)



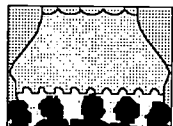
FAMILY CONNECTIONS

- Invite parents who are in the construction field to visit the classroom
- Ask families to send in pictures and/or notes about construction at their house or in the neighborhood for a class book. After the book is completed, circulate it among families.



LITERACY LINKS

- For the Truck Wash make tokens and tickets. Name and create a sign for the truck wash
- Label tools
- Name the trucks constructed from large riding toys



DRAMATIC PLAY

- Play with contents of prop box (hard hat, lunch box, steel-toed boots, tool belts, tools, safety goggles, and work clothes)



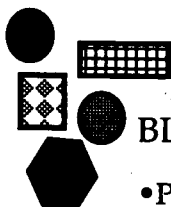
RELATED SOFTWARE

- *How Things Work in Busytown*
- *Sammy's Science House*
- *Busytown*
- *HyperStudio*
- *Kid Pix Studio*



EXTENSIONS BEYOND CLASSROOM

- Visit a construction site
- Take a field trip to a machinery shop
- Take a walk around the neighborhood to observe and discuss construction
- Invite a local implement or construction expert to school



BLOCKS/MANIPULATIVES

- Place toy trucks, cars, road signs, stop lights, etc. in the block area
- Provide dirt, sand, and rocks for road building (digging, loading, and transporting)
- Make puzzles using graphics from Big Job
- Display posters of big equipment in the block area
- Place 'tape' roads on the floor for children to follow
- Build with legos

Software Review

Exploring, Building, Learning Combine for Exciting Big Job Adventures

Big Job provides children an opportunity to explore a world of action-packed construction, farming, and fire rescue adventures. Children can get behind the wheel of a big rig and drive it. Some of the things children may do include taking control of the wrecking ball, participating in a tractor derby, and putting out a fire. This is just for starters; more fun ahead awaits. Children can assemble their own wacky big vehicles or construct city, farm and construction sites. The program has movies and music videos to view throughout which tell about equipment and jobs done in real life. Children can earn trading cards and certificates throughout the movies and activities.

Children will have CHIPP as their expert guide to the BIG JOB Clubhouse on the first visit. CHIPP explains how to use the posters on the wall to select a BIG JOB construction, farming or fire rescue adventure and how to change sites. CHIPP is available to help any time a child clicks on the yellow sign with a question mark.

From the BIG JOB Clubhouse, children can explore everything there is to do. One option is Turon's Work Site

Driving Adventure. There are seven movies for each adventure. Children get to drive a truck where they steer by moving the mouse left, right and straight. The radio can be turned on and stations changed. Also, the horn can be honked. Each driving adventure includes two activities/games. The next option is Axel's Body Shop where children can design and build their own vehicles. The vehicles can be printed. Another option is Winston's Simsit where children build work sites of their own by choosing buildings, landscapes, roads, vehicles, and more to place on their worksite. These work sites can also be printed.

Back at the Clubhouse, children can explore hot spots, play a music video by clicking on the jukebox, and play the Match-A-Machine game by clicking on postcards.

CHIPP's Big Screen displays trading cards and certificates. Children can see a movie about their current adventure. Certificates and trading cards can be viewed and printed.

Big Job is published by Discovery Communications, Inc. and is available from Edutainment (\$30.00).

System Requirements for *Big Job*:**Macintosh:**

Macintosh Performa, Centris, Quadra or PowerMac series; System 7.1 or later; 4 MB of RAM (8 MB recommended); 13" or larger Color Monitor with 256 colors or more; Double-speed CD-ROM drive

Other PC: Microsoft Windows 3.1 or later; 486-25 MHz or higher; 4 MB of RAM (8 MB recommended); Double-speed CD-ROM drive; VGA Display with 256 colors or more; Windows compatible sound card; mouse.

Pages 5-7 of this issue contain curriculum integration activities based on the contents of *Big Job*.

Macomb Projects will be at Closing the Gap!

*We invite you to visit our booth (*156) from October 22 -25. examine our products. and talk to our staff.*

See you there!

***Big Job* continued from page 5**

work. Have the children as a group build a road or building using props and construction toys. As the children build, talk about cooperation and shared task. For fun, have the children punch time cards and use stickers to keep track of their tasks.

- A graphics program will give children the opportunity to construct cities in a different environment.
- A *HyperStudio* stack featuring construction in the community will provide an opportunity for children to draw, write, talk, and animate their own construction site.

Summary:

Big Job offers children the opportunity to explore "monster" machines and experience how they work and what they do. Children learn about construction and what building roads or buildings involve. Most children will be able to relate their real life experiences to the program.

Teacher Raises Funds for Early Childhood Special Education Classroom's Computer Center

How do you find the necessary dollars for the much-needed computer equipment that you *know* can help the children with disabilities in your classroom? Mary Steelman, a teacher in one of Macomb Projects' site classrooms, was successful in exceeding her goal of raising \$3,500 for computer equipment she knew would benefit her students.

Mary's classroom participated in the Early Childhood Emergent Literacy Technology Project, a research project that studied the effects of interactive software on the emergent literacy behaviors of preschool children with disabilities. The Project loaned Mary's classroom the computer and other equipment she needed to participate in Project activities.

Many children in Mary's classroom have physical disabilities; some are autistic; and others are non-verbal. Mary attributes their significant progress in language and cognitive skills to their use of the computer and to their interactions with each other while using the computer, software, and adaptive devices.

Mary emphasized the benefits of the computer to the children: "One little girl said her first word at the computer while looking at pictures her parents had sent from home for us to scan into a *HyperStudio* stack about her family. We've have many of our students say their first words in this way. It [the computer] also bolsters the children's concept of themselves by allowing them more control over their environment."

In the fall of 1996, knowing the Literacy Project was nearing its end, Mary began her search for funds to purchase technology equipment for her classroom by applying to Ronald McDonald House Charities, which donated \$500 toward her goal. That \$500 donation

was matched by the local McDonald's franchise. Then she turned to her community. An article in the local newspaper highlighting her classroom's technology activities and the resulting success stories with the children brought in another \$1,000. That was when Mary began a letter-writing campaign. Each week she wrote letters to two businesses in her community, asking for their support for the children. From mid-February to mid-May 1997, the news coverage plus Mary's tenacious letter writing campaign raised \$2,975 to add to the money McDonald's had donated to Mary's classroom. Recently the parents of the little girl who spoke her first word as a result of the computer activities in Mary's classroom donated \$100, even though their daughter will be moving to another classroom in the fall.

What will Mary purchase with the funds she's raised? Her shopping list includes a Power Macintosh 6500, color monitor, Apple Scanner, Quicktake 200 digital camera, software, adaptive peripherals, and miscellaneous (but necessary) supplies, such as printer ink and paper.

Mary reached out to her community and found it supportive. Her belief in technology's benefits and the needs of the children overcame any hesitancy she had to embark on her fund-raising mission. Mary told the success stories of the children in her classroom, explained their need for computers and adaptive devices, and money came in—sometimes in large amounts, sometimes in small amounts—giving Mary funds needed to continue the work begun by her involvement in the Literacy Project.

Mary's successful fundraising provides both example and impetus for others to do the same.

The Adaptive Device Locator System

The Adaptive Device Locator System (ADLS) is a set of computer programs and databases that help users obtain information about specialized equipment and devices that can compensate for barriers imposed by limited physical capabilities. The Locator helps identify assistive and adaptive devices that can increase independence, facilitate education, and improve quality of life. ADLS guides users through a simple search process that results in lists of devices designed to meet specific functional needs. It provides the user with short device descriptions, pictures of equipment, and lists of sources for products and product information. In addition, ADLS will print letters and address labels automatically to manufacturers and distributors requesting catalogs and specific product information about an identified device.

ADLS covers technologies, equipment, and accessories that can improve independence and enhance functioning in seven different areas: existence, communication, in-situ motion, travel, environmental adaptation, rehabilitation, and sports and recreation. The seven databases include generic descriptions for almost 1000 types of devices, categorized under 400 different classifications. General graphic illustrations of devices are included to help the user understand how particular devices can be utilized.

ADLS is available for Macintosh, IBM and compatible PCs. The newly updated version 1.7 costs \$195 or the update is \$60 from Academic Software, Inc., 331 West Second Street, Lexington, KY 40507, 606/233-2332, (fax) 606/231-0725, (e-mail) asistaff@acsw.com. Or visit their World Wide Web site at <http://www.acsw.com>.

Using Software to Integrate Music into Your Classroom Curriculum

by Amy Betz and Jenny Bosworth, Expressive Arts Project

Music is an exciting and enjoyable experience for many children. It should be used throughout the day and used in different areas of the classroom rather than being limited to one time and one place during the day. Today's software titles can help you bring music to life in your classroom. The following are ways you can motivate your children to enjoy music. In many cases, the children are already motivated on their own.

The *Living Books™* series and other literature-based software have hot spots that, when activated, will play instrumental music or sing songs. Many children will repeatedly choose hot spots that play their favorite musical selections. In one of our classrooms, children stayed on one page of a new software title (*The Berenstain Bears In the Dark*) for what the teacher thought was an exceptionally long time. She encouraged the children to go to the next page. They did so, but after a quick look, they returned to the preceding page to hear a song played over and over again.

Richard Scarry's Busytown™ is a favorite of one of our titles even after being much classroom use for the past year. The program has a jukebox with a variety of songs. Children will visit the computer to sing and dance to the songs.

Familiar children's songs are a staple of many software programs. A *Silly Noisy House* has several children's classics such as "Rain, Rain Go Away" and "Twinkle, Twinkle, Little Star" *CircleTime Tales* and *Eensy and Friends* are based on "The Eensy-weensy Spider", "Five Little Ducks", and "Mary Wore Her Red Dress". The programs present animated versions of the songs. Dramatic play props such

as flannel board characters or stick puppets can be made by doing screen dumps. *Lamb Chop® Loves Music* lets children explore musical instruments and has a concert. Some of the instruments found in the program could be placed in the music center for children to explore on their own during center time.

A variety of programs are being marketed for children who are more interested in creating their own music than listening to others' music. *Thinkin' Things* has Tooney Loon and Oranga

Banga for children to play their own songs. Morton Subotnick's *Making Music* gives children the opportunity to draw a song. In this program, songs can be saved for later use. They can even be placed into a *HyperStudio®* stack. Imagine the fun your children will have singing and recording their own creations and then being able to listen to them on the computer.

With today's software, getting children excited about music is easy! See what you can do!

NICHCY Updates Parent Resource Guide and Popular Resource Directory

The National Information Center for Children and Youth with Disabilities has recently released its latest News Digests, the updates of *Parenting a Child with Special Needs: A Guide to Readings and Resources* and *Directory of Organizations*.

The *Parenting* publication provides a starting point for families in their search for information and resources. It was developed to respond to the information needs of parents—those who have just learned that their child has special needs and those who have lived with this reality for some time but who have reached a transition point where they need new information or renewed support. The publication is also helpful to professionals who work with families of children with disabilities, helping them understand the effects on their family and providing them with resource information.

The Digest contains two articles, "You Are Not Alone," by Patricia McGill Smith, Executive Director of the National Parent Network on Disabilities, and "The Unplanned Journey: When

You Learn That Your Child Has a Disability," by Carole Brown, Samara Goodman, and Lisa Kupper. The rest of the Digest contains resources for print materials, in general and according to specific disabilities, a listing of organizations, and a listing of publishers who provide information to families about disability issues.

The *Directory of Organizations* lists organizations that provide information, services, and/or referrals to parents, special educators, general educators, early interventionists, administrators, related services personnel, and persons with disabilities. A short description of each organization's activities is provided to help readers identify which resources are best suited to their needs and concerns.

The majority of publications through NICHCY can be obtained at no charge. And most of the publications, including the state resource sheets can now be accessed through their web site at www.nichcy.org. Further information on publications can be obtained from NICHCY. Phone 800/695-0285.

Software Review

Big City Experiences Provide Classroom Discovery Adventures

by Letha Clark, Technology Assessment Software Project

Sometimes, we should probably question why, as adults, we say and do some of the things we do. We tell young children a field trip will be "fun" then go on to describe it as an opportunity to see new things, learn about our heritage, discover another culture, and experience the history of our country. Somehow, that probably doesn't sound like fun to a young child.

But just imagine a trip to the city as it happens with Little Critter and his mom in one of Mercer Mayer's stories on CD-ROM, *Just Me and My Mom*. A train trip, a visit to the museum of natural history, a tour of an art museum, lunch in an exclusive restaurant, and a taxi ride all provide opportunities for Little Critter to "broaden his horizons."

Opportunities for discovery and mischief abound as Little Critter explores the wonder of the city. Be there as

Little Critter experiences the trip to the city with all the other critters. Click in all the right places to cause Little Critter to unearth new information about other critters that lived in different times and places. Be right there as Little Critter discovers some unique facts about members of different cultures. Discover what elegant dining means to Little Critter. Get caught in the traffic on the way to the train station with Little Critter and his mom.

Just Me and My Mom may be a light hearted look at the "busy"ness of Critter City but Little Critter ends his trip excited with his discovery of some "really cool stuff." Opportunities for young children to discover and question may open new avenues of interest. Those "Why did...?", and "How come...?" questions provide unbidden teachable moments to elaborate on occasions and circumstances that are real.

Make the most of Little Critter's antics to support a future adventure or a past experience. Use his escapades to begin dialog and trigger discussions. Little Critter may be the animation of someone you know.

Edmark Software Now in Spanish Versions

Four of Edmark's most popular, award winning programs are now available in Castillian Spanish versions. *Millie's Math House*, *Sammy's Science House*, *Trudy's Time and Place House*, and *Thinkin' Things Collection* I have been available in Spain and are now being distributed in the U.S.

The programs emphasize social studies, science, math, and thinking skills and will have uses for Spanish language instruction or for bilingual instructions for students, preschool through grade 4, for whom English is a second language.

CD-ROM versions are available for Macintosh and IBM/Compatibles running Windows 95 or Windows 3.1.

The Edmark web site at www.edmark.com has further information.

Technology Assessment continued from page 3

If Steven has the ability to do these beginning scanning skills, then the next step is to assess his intentional use of progressively more difficult scans. We may use *aMAZEing Ways* (Don Johnston) which contains several switch activities with mazes. We would continue to assess his scanning skills until either Steven tires or the team has a good evaluation of his abilities.

Other methods of input, such as a touch tablet or adapted mouse, may be assessed during the session. If a child has enough hand control to use direct select method of input, the Key Largo or IntelliKeys may be an option. Assessment of these devices should begin with simple software which is activated by a press anywhere on the sur-

face of the device. This way the team can assess the child's physical ability to use the device, before progressing to different levels of touch tablet use.

In the next issue we will conclude the assessment day procedures with further information on assessment of touch tablet and other methods of input. Procedures for report writing and follow-up services will also be covered. A complete description of the TTAP assessment procedures and a copy of TTAP's assessment forms are available in the manual, *The Technology Team Assessment Process*. Contact the Macomb Projects office for ordering information.

Software referred to in this article can be purchased from Don Johnston Inc., 800/999-4660.

**Overlays for
Millie's Math House
are available from
Macomb Projects.
Call 309/298-1634 or fax
309/298-2305 (attn: Vicki)
for more information.
See our product catalog at
www.mprojects.wiu.edu**

Levels of Switch Progression with Suggested Macintosh Software

by Linda Robinson and Carol Schneider, Project TTAP

Families and teachers often voice frustration over the fact that a child is not using his expensive augmentative communication device. There may be many reasons for this lack of use. One common cause for switch users is the inability to appropriately use a switch in order to communicate. We have found that there is a progression of skills needed before a child can use a switch effectively. The child cannot be expected to know how to scan pictures or words with a switch without proper training. After achieving causality, he must learn that there is an appropriate time to press his switch, and that specific switch pressing will result in communication. By starting with simple software programs, which at times seem like games, the child can master the skills needed to communicate with a device, such as the Liberator, or to do word processing functions through use of his switch.

Many simple activities can be done to teach or reinforce these switch skills. The following is a list of skill levels defined by our Project combined with suggested Macintosh software. Some programs which have more than one activity on the disk help reinforce different switch skills and are therefore listed under more than one skill area.

Level 1: Simple Switch Input

One switch activation repeats an action for beginning cause and effect.

Software

Switch Intro - Colors, Willy the Worm, Make It Sound (1 switch),
Piece by Piece, Hidden Pictures, Jigsaw Pictures, Step by Step
Circletime Tales
Storytime Tales
Press to Play Series
The Rodeo - Let's Play

Company

Don Johnston Inc.
Don Johnston Inc.
Don Johnston Inc.
Don Johnston Inc.
SoftTouch/kidTECH

Level 2: Two Switch Input

Each switch causes a different action

Software

Switch Intro - Make It Sound (2 switches)
Games 2 Play - Select 1 Player, 2 Switches: Soccer,
Rabbit Race, Treasure Island

Company

Don Johnston Inc.
Don Johnston Inc.

Level 3: Appropriate Time to Press Switch

The software presents the child with an auditory or visual cue. The child presses the switch only after hearing or seeing cue.

Software

Switch Intro - Start to Scan, Match Scan
Hit'n Time - Balloons, Brickwall
ToyStore - Color Box, Astroman, StoryTeller, Match-It, Shape Train
aMAZEing Ways - Fire Engine, Maze, Fishing Boat
The Rodeo
Press to Play Series
Workshop

Company

Don Johnston Inc.
Don Johnston Inc.
Don Johnston Inc.
Don Johnston Inc.
SoftTouch/kidTECH
Don Johnston Inc.
Don Johnston Inc.

continued on page 13

Levels of Switch Progression continued from page 12

Level 4: Double Input Selection and Appropriate Time to Press Switch

Child presses switch to initiate an action. After auditory or visual cue, child presses switch again for desired results.

Software

Hit'n Time - Parachutist
Workshop

Company

Don Johnston Inc.
Don Johnston Inc.

Level 5: Double Input Selection, Appropriate Time to Press Switch, and Object Placed in Specific Position

Child presses switch to initiate an action. Child waits until specifically placed item is highlighted. Child presses switch a second time.

Software

Toystore - Remember It
Camelephant
Workshop

Company

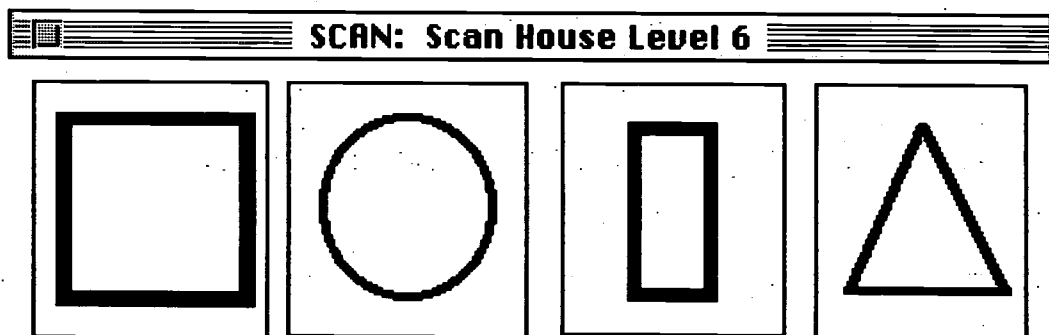
Don Johnston Inc.
Don Johnston Inc.
Don Johnston Inc.

aMAZEing Ways and *Toystore* programs can be used at this level with two switches. One switch controls the scan movement, and the second switch controls the selection of the item.

Level 6: Double Input Selection, Appropriate Time to Press Switch, Object Placed in Specific Position and Intent to Communicate

The child presses the switch to initiate the scan. The child selects a desired item as it is highlighted. The child presses the switch a second time to achieve an intended outcome.

Any program can be set up to use a scanning array with Ke:nx®, Discover:Kenx®, or Discover:Switch,™ for example, *Millie's Math House* (Edmark) "Build A Mouse House" with ACTT's Ke:nx set-up file, "Scan House Level 6." The child presses a switch to start the scan of 4 boxes at the bottom of the screen. A second switch press then selects the desired shape. See the figure below.



Software continued from page 1

Examples of Software that May Be Incorporated into Selected Curricular Themes

How Software Can Be Used	Software Containing Relevant Activities
1. To supplement a curricular theme <ul style="list-style-type: none"> • animals • farm • dinosaurs • people and places • families 	<p><i>Camelphant, Let's Explore the Zoo, Putt Putt Saves the Zoo, Stلالuna</i></p> <p><i>Big Job, Forever Growing Garden, Let's Explore the Farm, McGee Visits Katie's Farm</i></p> <p><i>Dinosaur Days, Dinosaur Explorers, Dinosaur in the Garden, Dinosaur Kids, Talking First Dinosaur Reader, What Makes a Dinosaur Sore?</i></p> <p><i>ArtSpace, Richard Scary's Busytown, How Things Work in Busytown, My First Amazing World Explorer</i></p> <p><i>Amanda's Stories, Arthur's Birthday, Berenstain Bears Get in A Fight, Just Me and My...(Mom, Dad), Just Grandma and Me</i></p>
2. To support concepts or develop skills <ul style="list-style-type: none"> • literacy • math • science • creativity 	<p><i>A to Zap!, A Day at Play, Bailey's Book House, Circletime Tales, Dr. Seuss's ABC's, My First Incredible Amazing Dictionary, Stickybear's Reading Fun Park</i></p> <p><i>James Discovers Math, Millie's Math House, Nick Jr.—Math Play, Thinkin' Things</i></p> <p><i>The Backyard, Ozzie's World, Sammy's Science House, Zurk's Learning Safari</i></p> <p><i>Amazing Writing Machine, ArtSpace, Blocks in Motion, Gryphon Bricks, Gus and the Cyberbugs Sing, Play, and Paint A-Long, Kid Pix 2, Kid Works Deluxe, Lamb Chop Loves Music</i></p>
3. To help children understand other cultures	<p><i>The Magic Tales Interactive Storybooks Collections I and II (folk tales of Russian, Japanese, African, Irish, Italian, and Native American origin); Many Lands, Many Playgrounds</i></p>
4. To allow children to explore characters and situations in favorite books or to play favorite games	<p><i>Arthur's Teacher Troubles, Green Eggs and Ham, Harry and the Haunted House, If You Give a Mouse A Cookie, Stلالuna</i></p> <p><i>Candy Land Adventure, Mr. Potato Head, Playschool Puzzles</i></p>

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Software continued from page 1

Favorite characters in interactive story books may be printed, laminated, and used as finger puppets, play props, art activities, and classroom decorations. Similar screen prints can be laminated and attached to a child's switch to provide switch press cues or images can be added to a nonverbal child's communication board so he can indicate choices.

A classroom pancake adventure began in one classroom when the teacher integrated the pancake-making story in *Pippi Longstocking*. The dramatic play center was transformed into a pancake shop, complete with kitchen for "cooking" the pretend pancakes children made and decorated in the art center. In another 'real' cooking activity, the teacher first created a *HyperStudio* stack containing written, spoken, and animated directions children could follow to make pancakes. Following the directions, the children made pancake batter cooked by the teacher for snacktime. Afterwards, a graph showing favorite choices of pancake toppings was developed.

If technology is to enhance early childhood experiences, then software containing a variety of components designed to meet children's changing developmental needs is essential. Selecting and finding creative ways to use software to support or initiate curriculum-based or daily activities and children's interests is an important responsibility for early childhood teachers, staff, and family members.

Whether you are considering software to include in the classroom or home software library, evaluate it carefully. As part of the evaluation, explore ways to extend the content of the software beyond direct computer use if you want to provide a creative learning environment for children and, at the same time, get the most value from software purchases.

Calendar of Conferences

July 8-12, 1997: ConnSENSE '97 in Windsor Locks, CT. Contact Chauncy Rucker, 860/486-0165.

July 26-31, 1997: Alliance for Technology Access Institute in Nashville, TN. Contact 415/455-0654.

August 6-8, 1997: 13th Annual Conference on Distance Teaching and Learning in Madison, WI. Contact Nancy Kilberg, 608/265-4159.

September 22-24, 1997: 5th Annual Technology and Inclusion Conference in Austin, TX. Contact (fax) 512/891-9288.

October 16-19, 1997: Florida Assistive Technology Impact Conference (FATIC '97) in Orlando, FL. Contact Mary Stoltz, 813/781-1239.

October 23 -26, 1997: 15th Annual Closing the Gap Conference, Microcomputer Technology in Special Education and Rehabilitation in Minneapolis, MN. Contact 507/248-3294.

November 2-4, 1997: 1997 Pennsylvania Assistive Technology EXPO in Hershey, PA. Contact 717/774-5455.

November 13, 1997: 5th Annual Assistive Technology Expo '97 in White Plains, NY. Contact 914/285-7364.

November 13-16, 1997: TEL•ED, ISTE's 6th International Conference on Telecommunications and Multimedia in Education, in Austin, TX. Contact ISTE, 1787 Agate Street, Eugene, OR 97403.

November 20-23, 1997: American Speech-Language-Hearing Association's 1997 Annual Convention in Boston, MA. Contact 301/897-5700.

November 20-23, 1997: International Early Childhood Conference on Children with Special Needs in New Orleans. Contact DEC, 3 Church Circle, Suite 194, Annapolis, MD 21401.

Disability Publication Provides Resource Information

Disability Resources Monthly is a newsletter that provides readers with topical articles and news about books, pamphlets, videos, on-line resources and organizations that can help people with disabilities, their families, and their service providers. Information includes free, low-cost, and hard-to-find resources.

A 1 year subscription is \$25.00. An 18-page subject guide to 300 toll-free numbers can be obtained for \$4.00 or less, depending on the amount ordered.

For more information, contact Disability Resources, Inc., Four Glatter Lane, Centereach, NY 11720; (516) 585-0290.

Pen-Pal Program Links Children to Others with Similar Disabilities

Children's Hopes & Dreams Foundation offers a free pen-pal program for all children with chronic or life threatening illnesses/disabilities, ages 5-17. To date, nearly 7,000 are participating in the program.

If a child is interested in becoming a pen pal, enrollment is as easy as completing and returning an enrollment card. The child is then matched to another child with the same age, gender, and illness/disability category.

Order postage-paid enrollment cards from Children's Hopes & Dreams Foundation, 280 Rt. 46, Dover, New Jersey 07801.

ACTTive Technology Subscription Form

Name _____

Agency _____

Street Address _____

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For a year's subscription to *ACTTive Technology*, complete this form and return it with a purchase order or check for \$16.00 to Macomb Projects, 27 Horrabin Hall, Western Illinois University, Macomb, IL 61455.

Orders from outside the U.S. must be paid for in U.S. funds drawn from U.S. banks.



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VOLUME 12, NUMBER 3

Summer 1997

Armed and Ready: The Potential Power of The Technology Assessment Report for Families

by Linda Robinson

The written recommendations and report from a technology assessment could be the key many families need to open doors for their children. By itself the technology assessment report has no power, but in the hands of a concerned family or educator, it can be used to justify the purchase and use of computer equipment at home or in a classroom. Over the past eight years TTAP staff have heard from many families who have acquired equipment for their children as a result of the report. The report can be used to get funding locally, regionally or through national organizations and foundations. Families are "armed," because they have the ammunition needed to justify incorporating technology into the IEP/IFSP. They are also ready to fight for what their children need.

So how should this report be written so that it can be used the most effectively by families and educators? To answer this question we need to go back to the assessment day and consider how to pull together all of the information on the child's abilities that the team has gathered.

As an assessment team you have looked at the child's positioning, equipment placement, a suitable input method, several software applications, and any needed adaptations. You are confident in your knowledge of the child's abilities to use technology for

specific IEP goals, so what is the next step? As soon as possible after the assessment, team members will summarize all observation notes and forms and perhaps review the videotape from the assessment to fill in any questionable areas. This information will be used in writing the assessment report.

Two forms, developed by TTAP which are used during the assessment and which make report writing easier, are the *Individual Trial Form* and *TECH ACCESS* (Technology Assessment for Computer Capability for the Education of Special Students). The *Individual Trial Form* is used to record observations on each activity, including what software and input method are being used, the child's position, peripheral placement, adaptations used, description of activity, child's reaction, and observer's comments. The other assessment form, *TECH ACCESS*, is used not only to record observations but to help in writing recommendations. This tool is a guide for assessing reliable movement, and switch, touch tablet, and keyboard input, and for making recommendations in each of these areas. Both of these TTAP forms can be useful during the assessment report writing process.

The report should begin with **background information** about the assessment, such as the child's name, address, phone, age, date and location of the assessment, and a list of the team

members participating along with their positions. The **reason for the referral** for the assessment and **evaluation goals** should be stated. This information is important, since it reflects the purpose for the assessment and what type of recommendations are needed. For example, if the family and school staff need to find ways that the child can use existing equipment, then the set of recommendations should reflect that purpose. Whereas if there is no equipment currently available for the child, and the family or school have money to purchase a new computer system, then recommendations on the latest equipment and software should be made.

Equipment and software used during the assessment needs to be listed in the report, whether or not each program and input method was successful. The child's positioning and the **equipment set-up** should be described briefly, such as "The child was evaluated from a small plastic cube seat when using battery-operated toys, and from an adaptive Rifton chair for the computer activities." If the computer is placed on an adjustable table, that should be stated. Other considerations include whether the child is positioned in a wheelchair and if so, is the tray being used for the placement of a switch or touch tablet?

A summary of **Observations** should include a paragraph describing each

continued on page 3

From The Editors. . .

by Linda Robinson

Watch out—here we come, with new software, videotapes, books, and 3 new curricula! Macomb Projects staff will be seen and heard at many conferences this fall. Our biggest appearance will be at Closing the Gap in Minneapolis in October. As a group of federally funded projects and one state funded project we have always had a number of products on technology available. We have also met many of you through presentations or displays at national, state, and regional conferences. But we have not exhibited our products and services at a large technology conference before. So this year we have adopted a new approach and we're expanding our marketing tactics. We hope to meet thousands of people interested in early childhood technology.

So why should we be so anxious to reach so many people this year? We have been fortunate to have staff with a variety of areas of expertise working on product development over the past few years. Areas include expressive arts, literacy, and technology integration. As a result, we now have three new curricula: *ArtExpress*, *Interactive Technology Literacy Curriculum*, and *Building InterACTTive Futures*, a revised version of our 1990 curriculum. The name is similar, but the format, activities and information are all brand new. New curriculum activities with user friendly icons and lots of integration ideas, and instructions for making off-computer materials, such as a communication apron or computer cover, are included for several items.

ArtExpress is a product of our Expressive Arts Project, a five-year project which developed a model for integrating art, music, and drama into the early childhood curriculum. The curriculum contains many adaptations using no tech, low tech and high tech solutions.

The third curricula is a product from two of our literacy projects, The Interactive Technology Literacy Curriculum Project and the Early Childhood Emergent Literacy Technology Project. One project is in its third year of developing a model for integrating technology into literacy activities. The other is a research project which recently ended its three year study of the effects of an interactive technology literacy curriculum on preschool children, families, and school staff. The Interactive Technology Literacy Curriculum contains many computer activities and information on interactivity levels of software, designing a literacy-rich environment, family involvement ideas, child learning styles and helpful tips for using equipment, such as a scanner, digital camera and video card, for creating literacy materials.

Besides these great new curricula, Macomb Projects has a variety of videotapes available on technology and early childhood. A whole set of literacy modules have been developed for Head Start programs throughout the country. These include videotapes and manuals on 8 topics related to emergent literacy development. One of our Projects also sponsors a monthly satellite broadcast, APPLS Magazine. Videotapes and written materials from over 70 shows, with topics ranging from ADD to Motor Development to Connecting Families and Communities, are available.

Sound like a lot of materials? We are anxious to share them with families and educators working with young children. If you're going to CTG, be sure to check out our booth, #156; otherwise look for us at other conferences. And if you are unable to get out this fall, call our office to request one of our new catalogs.

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activity. The purpose, the software, input method, and adaptations used, and the child's interest and ability to participate should be included for each activity. Also it is helpful to the reader if the software is described briefly, such as *"The Nursery Rhyme portion of the program was chosen, since it presents three picture choices at the bottom of the screen."* When an input method or software program is changed, a transition should be written which explains the purpose of changing to another activity. For example, *"Since I seemed to do well with a simple switch program, we decided to assess his ability to visually track a small box on the screen, a beginning scanning skill."* Or *"To further assess J's use of the switch with software, we decided to go back to the Jellybean Switch...."*

The team's observations should be written in the order in which the activities occurred, however you can add a heading to paragraphs to help separate different input methods and software. A TTAP Report may have the following headings, Switch Activity - Battery-operated Toys, Switch Activity - Workshop, and TouchWindow Activity - HyperStudio. In this way a reader can skim through the report and get an idea of what input methods and software were used without having to read the entire Observations section.

After the observations have been summarized, recommendations can be written. In the TTAP Report we begin the **Recommendations** section with a paragraph summarizing the child's abilities and interests. Specific suggestions for Input Method, Computer Equipment, Software, Equipment Placement and Goals follow. Under Input Method, if we are recommending a switch, then we give information on a specific type and why this one seems to meet the child's needs. For

very young children we may recommend a switch and battery-operated toys, in which case we also provide resource information for the switch and toys. If a switch holder is needed, a commercial or home-made one is suggested. TTAP has schematics for a customized switch holder which is included with the report. If a touch tablet is recommended similar resource information is also provided. The main consideration under Input Method is to explain the purpose for recommending a certain device and for what applications the device will be used.

If a new computer system is being recommended, it is wise to list general considerations, such as RAM, hard drive space, CD-ROM drive, and size of monitor, rather than suggest a particular model. The recommendation may not be met until a year or more later, at which time a specific model may no longer be available. Again explain why these computer considerations are important.

When recommending software, list possible IEP goals which may be met through use of a particular software program. For example, *"Switch Intro is a beginning switch program which reinforces attending and visual tracking skills."* If there is a specific part of a software program which is being recommended, then it should be listed also. For the previous example, "Willy the Worm" should be suggested, since it is the one part of the software which reinforces the targeted skills.

If there is a particular placement for the equipment this should be mentioned under Recommendations. If you know that there has been a problem with designing the computer environment in the child's classroom, this may be a good place to write some helpful tips for the school staff. Placement recommendations may also include suggesting an adjustable computer table if the

monitor and computer are not at a suitable height for the child, or adapting what the classroom already has available.

As a final part of the Recommendations, suggested goals can be included. Review the purpose for the assessment and what IEP/IFSP goals the child and family have. Then provide some ideas on goals for using technology at this time. In TTAP we always recommend consistent use of the equipment, no matter what the specific goal. We may also include a curriculum activity to go along with a recommended software program.

The assessment report is ended with a brief **Summary**. Recommended equipment and software are listed and closing statements are made. The TTAP report ends with a short paragraph describing **follow-up support** for the family and school staff who work with the child. Resource information on software and peripherals are included with the report.

A well written and thorough report can provide valuable information to the families and other support team members. It is meant to be read and followed by staff who work with the child. As the child progresses follow-up assessments will be needed to provide the family and school with ammunition to insure the child's full potential is being met.

Further details on TTAP's assessment report format and procedures, as well as the forms referred to in this article, are available in written form as **Technology Team Assessment Process**. The 211-page manual may be ordered from Macomb Projects for \$70. The narrative of the assessment process along with all of the assessment forms and selected video segments from child assessments will be available on CD-ROM as *Tap Into TTAP* in 1998.

Software Review

City Adventures with Little Critter and His Mom

Join Little Critter and his mom on their trip to the city. Little Critter reads the story and then children can interact with each page. The pages are full of animation, sounds, humor, and surprises. There are seven secret screens to look for throughout the story which are either movies or interactive pages.

In the story, Little Critter and his mom take the train to the city. Little Critter gets to purchase the tickets and then hold on to them. While in the city, they visit the museum of natural history, aquarium, art museum, and a department store. Little Critter and his mom try having lunch at a restaurant but Frog was not allowed. They end up eating at the hot dog stand. Then Mom and Little Critter take a taxi ride through the city on their way to the train station to go home.

On each page of the program, children will find Little Critter's friend, the frog. The frog is a hot spot on most of the pages. Often he sings and dances while imitating famous singing stars (from Elvis to Michael Jackson).

Children can make several choices at the Main Menu. They can choose to **Play** where the story is read page by page; then children can click on hot spots to interact. Another choice is **Read** in which the story is read straight through. Also, there is the option to go to a specific page. The fourth choice is **Music** where children can listen to six different songs as well as find hot spots. Little Critter and his band perform each song. The words to the songs appear across the bottom of the screen. With a click on the keyboard icon, children may play the piano to make their own music.

Just Me and My Mom is published by GT Interactive Software and sells for around \$25.00. Macintosh system requirements are 68040-33 or higher processor; 8 MB RAM with 5 MB available; System 7.1 or later; 640 x 480, 256-color display; double speed CD-ROM drive. PC requirements are Windows 3.1 or later; 486SX-33 or higher processor; 8 MB RAM, Super VGA (640 x 480, 256-color display); double speed CD-ROM drive; SoundBlaster 16 or 100% compatible sound card. Speakers are optional but recommended for either system.

See pages 5 - 7 for curriculum integration ideas.

Software, Curriculum Full of Art Experiences

The benefits of creating and exploring art are important to all children, with or without disabilities. Macomb Projects' *ArtSpace* is software designed especially for children who have physical disabilities that make drawing difficult, if not impossible for them.

In addition to "The Studio," which is described on page 9 of this issue, *ArtSpace* contains interactive museum exploration of artwork by adults ("Adult Gallery") and by children ("Children's Gallery"). Children can see close ups of artwork, hear zany sounds and lively music, listen to comments about the art, and watch videos of artists (adults and children) creating art. Its unique features also make it equally popular for adults and children without dis-

continued on page 8

New Project Uses Internet to Foster Collaboration and Communication Among Young Children

Macomb Projects is pleased to announce a new addition to our family of technology projects. *TEChPLACES*, funded by the Technology, Educational Media, and Materials for Individuals with Disabilities Program, is a collaborative effort among six entities: Macomb Projects within the College of Education and Human Services at Western Illinois University, teachers in four school districts (Colchester, Industry, Macomb and Northwestern), and the LaMoine Valley Vocational System Program. The Project is designed to foster a state-of-the-art instructional environment that makes full use of the collaborative interaction and communication potential of the Internet and communication technology so that it can be accessed and used by children with disabilities, then replicated for use by others.

The two-year project has three components: 1) a *TEChPLACES* Internet site which will culminate as a CD-ROM, *TEChPLACES First Communities*, and an ongoing site; 2) a *TEChPLACES* home page on Macomb Projects' World Wide Web site (www.mprojects.wiu.edu) which will contain continuously updated samples of *TEChPLACES*' activities, procedures, and progress reports; and 3) a CD-ROM, *TEChPLACES Construction Kit*, that contains documentation, media, procedures, source code, and a 'template' to replicate the project in other locations with similar or different tasks, content, outcomes, and platforms.

At the end of the project, the CD-ROMs produced in Components 1 and 3 will be available as a *TEChPLACES Construction Set*.



Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from the *Interactive Technology Literacy Curriculum (ITLC)* currently being developed at Macomb Projects.

Activities to Use with *Just Me and My Mom*

Introduction:

Mothers or mother figures are very important parts of children's lives. Mothers and children share special adventures together. On this particular day, Little Critter and his mom visit the city, an opportunity many children living in rural areas do not often experience. Children interacting with *Just Me and My Mom* have the opportunity to experience several aspects of a big city. The program offers an exciting way for children to explore the city at their leisure.

Materials:

Macintosh computer or IBM/compatible
Just Me and My Mom software by GT Interactive Software
Books and poems about cities and moms.

Ahead of Time:

The teacher should examine the program *Just Me and My Mom*.

Introductory Activity:

Read selected poems from *Street Music: City Poems* by Arnold Adoff. The poems in this book celebrate city life. Talk about children's favorite poems and make a chart to display in the classroom. Also, display any pictures of the city including trains, restaurants, museums, aquariums, department stores, taxis, and city streets. Children may share their ideas about city experiences or what they might like about the city. Children may share stories about special times with their moms. Then read the book *Say It* by Charlotte Zolotow. The story is about a mother and her daughter's walk together on an autumn day.

Computer Activity:

As a class activity, children may have the opportunity to view and interact with *Just Me and My Mom* software individually or in small groups during the day. Ask children open ended questions as they view the program. You might ask questions like: What do you and your mom like to do together? Have you ever been to the city? How was the city different from where you live?

Extended Activity:

Children from smaller towns/cities or rural communities can communicate with a city-dwelling Pen Pal over the Internet. The children can share everyday experiences with other children. This will offer the opportunity to learn about both city and country life. Also, a teacher may find another classroom to adopt as their "city" or "country" friends.

Create a *HyperStudio* stack of city sounds. Read *City Sounds* by Rebecca Emeberley in which sounds of the big city are brought to life in labeled pictures. Children can then choose a city sound (one of their own or an idea from the book) and illustrate in *HyperStudio* or draw on paper and scan. Sounds can be recorded with the picture. Children can make sounds, imported sounds from a sound library, and/or capture sounds around the school community.

continued on pages 8

JUST ME AND MY MOM

CURRICULUM INTEGRATION IDEAS



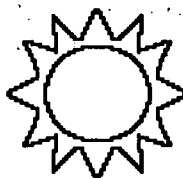
COOKING/SNACKS

- Set up a pretend coffee shop.
- Make hot cocoa and serve it with animal crackers.
- Make tuna salad sandwiches with lettuce, tomato, and a green olive.
- Taste different ham dishes: fried eggs & ham, ham & cheese, ham kabobs, glazed ham, ham on toast.
- Serve lunch at a hot dog stand; serve mini-hot dogs with "the works."



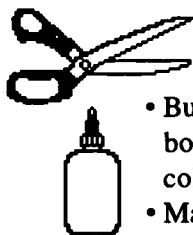
SCIENCE/MATH

- Study dinosaurs and mummies.
- Set up a department store and use play money to purchase toys. Make shelves and let children sort toys to put on the shelves.
- Exchange play money at the coffee shop.



OUTDOOR PLAY/MOTOR

- Play Train Express: use decorated wheel toys and a ticket booth. Also make tracks with tape and post RR signs.
- Walk like a dinosaur.
- Set up a seal show with beach balls, hoops, jump ropes, etc. Toss beach balls through hoops. Pretend to be seals and balance balls on noses.



CONSTRUCTION

- Build skyscrapers using assorted boxes (i.e., shoe box, cereal box), glue, tempera paint, scissors, and collage materials.
- Make the train ticket booth from an appliance box and then create props (e.g., tickets).
- Use cardboard and paint to decorate wheel toys like train engines and train cars.
- Construct dinosaurs or buildings from popcicle sticks and glue. Use markers to color.



ART

- Paint using a variety of paint brushes and colors. Change the art media throughout the unit (i.e., watercolors, oils, pastels). Also use different items to paint with (e.g., Q-tips, sponges, straws).
- Make under the sea collages with shells, sand, rocks, etc.
- Create sculptures from modeling clay.



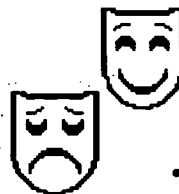
RELATED BOOKS, POEMS, STORIES

- Little Critter books by Mercer Mayer
- *City Seen from A to Z* by R. Isadora
- *Jonathan and His Mommy* by I. Smalls-Hecor
- *Round Trip* by Ann Jonas
- *Underground* by D. Macaulay



SENSORY

- Play a tape recording of city sounds and ask children to identify them.
- Set up the water table with sea animal toys, boats, and measuring tools.
- Dig for dinosaur bones. Fill the sand table with dirt and add fossils, bones, rocks, etc.
- Place small toys in a box with a hole so children can feel and identify different objects.



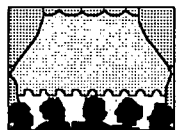
GROUP/INDIVIDUAL STORY EXPERIENCES

- Read *Just Me and My Mom* book. Set up a train and/or a taxi with chairs. Pretend to ride to the city with mom.
- Produce a book of "What I Like to Do with Mom" stories as a regular book or as a HyperStudio stack.



FAMILY CONNECTIONS

- Share experiences children have had with their moms. Bring photos, video, etc. of a special time with mom.
- Have a "Just Me and My Mom" day. Make "You're Special" cards for mom using the computer. Decorate the classroom with banners and signs made on the computer.
- Invite parents who work in or grew up in the city to talk and share experiences with the class.
- Invite a parent who works for the railroad or drives a taxi to visit class.



DRAMATIC PLAY

- For the Restaurant or Coffee Shop, add the following props to the housekeeping area: menus, ticket pads, play money, table cloth, cloth napkins, apron, bow tie, dishes, utensils, flowers and vase, salt and pepper shakers.
- For the Aquarium Seal Show, add the following props: stuffed sea animals, beach balls, hoops, noise makers, balance beam, and ruffle collars
- Recreate the Native American exhibit with a teepee, homemade costumes, drums, Indian corn, and totem poles



EXTENSIONS BEYOND THE CLASSROOM

- Visit a museum. Most local colleges have an art museum on campus. Many towns/counties have local historical museums.
- Take a field trip to a local department store.
- "Dine out" at a restaurant or coffee shop (or just visit).
- Go for a train ride on Amtrak or the local commuter train.



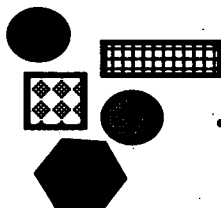
LITERACY LINKS

- Make a sign for the Train Express, including ticket booth. Children can make tickets to various cities.
- Make cards for mom on the computer or at the writing center.
- Create menus for the restaurant in the dramatic play area. Also, make a "Today's Special" sign on the chalkboard.
- Make billboards, street signs, and taxi sign for the block city.



RELATED SOFTWARE

- *ArtSpace*
- *3D Dinosaur Adventure*
- *HyperKeys*
- *Sleeping Cub's Test of Courage*
- *Putt Putt Saves the Zoo*
- *Kid Pix Studio*
- *Big Job*
- *Just Me and My Dad*
- *Just Grandma and Me*
- *Green Eggs and Ham*



BLOCKS/MANIPULATIVES

- Construct roads and buildings from blocks. Also, buildings can be made from milk cartons. On the floor, use fabric printed with roads. Place toy people, cars, trucks, and motorcycles in the area. Turn cars into taxis by making signs for the top. Children can make billboards, street lights, and street signs for their block city.
- Display photos and drawings of city buildings, taxis, billboards, museums, department stores, and an aquarium.
- Put a train set in the block area.

ELIPSS Begins Second Season of Literacy Programs

by Susan Schoon

Macomb Projects' Project ELIPSS (Emergent Literacy Instructional Program and Support Services) will broadcast two new modules focused on integrating math and science with emergent literacy activities on November 19 and December 10, 1997 from 3-4 p.m. central time.

November's Module 7: *Science, Math and Literacy...A Winning Combination for Young Children*. Children's books are wonderful tools for helping children explore math/science skills such as observing, comparing, communicating, inferring, predicting, and learning time and space relationships. Young children are born investigators! They delight in learning new skills and developing new understandings about their world. Since children need the same basic tools or process skills as they develop concepts in both science and math, integration of these two curricular areas is a natural! In this module, we will examine the math and science-related skills and concepts appropriate for inclusion in programs for preschool children. We will then model strategies for introducing children to these skills and concepts through the use of various children's books and activities which also serve to foster emergent literacy interests and abilities.

December's Module 8: *Science, Math and Literacy: A Way of Life for Young Children*. Science and math are "life" for young children. Whether they are figuring out how to divide up the cookies, how much water to add to the flour to make paste, or discussing how many blocks are needed to make a castle, they are actively involved in scientific and mathematical reasoning and problem-solving activities. In this module,

we will explore a variety of ways to provide children with hands-on science and math experiences that support their growing interests and abilities in listening, speaking, reading and writing. Instructional activities shared will enable both teachers and parents to integrate math and science with children's books related to a variety of themes.

Other components for the new funding period include: re-broadcasts of the Emergent Literacy Training Modules 1-6, developed during the past funding period; follow-up and technical assistance services to meet the varying needs of all learners; opportunities for Head Start personnel to train to become Literacy Resource Consultants; viewing guides for Modules 1-8 in both English and Spanish; and dissemination of information about ELIPSS products and services.

The Emergent Literacy Training Modules 1-6 will be broadcast during Western Illinois University's Spring 1998 semester, and ELIPSS will offer both graduate and undergraduate credit through WIU for those participants who wish to register for credit and complete the assigned coursework.

Videotapes of the new broadcasts will be edited for inclusion with the training package that was produced during the previous funding period.

For more information about the broadcasts, university credit, or registration, call Project ELIPSS at 309/298-1634 or fax 309-298-2305.

Project ELIPSS is funded by the U.S. Department of Health and Human Services, Administration for Children, Youth, and Families, Head Start Bureau.

ArtSpace Software continued from page 4

abilities. Artwork in a variety of styles and forms from both famous and unknown artists is included. The "Categories" feature makes it possible to explore the museum offerings by one of 17 categories (e.g., Flowers, Water, Transportation).

Preferences can be set for a variety of options. Mouse, TouchWindow, and Switch are options for input. Prompts can be turned on or off, as can the option for auditory cues during scanning.

ArtSpace is available with a curriculum filled with tips for using the software and integrating art-related activities across the curriculum.

The software and curriculum are available for \$49.95 from Macomb Projects. *ArtSpace* is available alone for \$29.95.

Checkout more about *ArtSpace* on the IntelliTools' web site at www.intellitools.com/exchange/ArtSpace_Mouseless_Access.htm

Curriculum Activity continued from page 5

Use Little Critter's music section in your music center. If you have two computers, move one to the music area. Have a variety of instruments available for the children to play as they listen to the songs. There are six songs to choose from and the words appear at the bottom of the screen. Children can sing along as well as play instruments. Chart the songs for children so the words can be seen by a group. A keyboard could also be placed in the center for children to make their own music. Don't forget that headphones can be attached to the computer for individual listening experiences.

Summary:

Just Me and My Mom provides an opportunity for all children to visit a big city. Although children may live in a rural community, they can learn about the city through computer software.

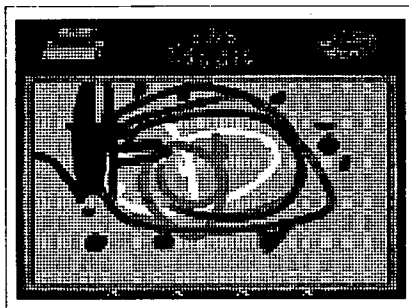


Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from *Art Express*, the curriculum product of the Expressive Arts Project.

Drawing in the *ArtSpace Studio*

"The Studio" is a program in the software *ArtSpace* where selected drawings can be recreated. Using an interactive multimedia approach combining sound, photographs, video, and graphics, "The Studio" is designed so children, including those with multiple disabilities, can experience simulated drawing and painting derived from art made by children, with and without disabilities, ranging in age from two to sixteen. Children can simulate the drawing of selected images by repeatedly pressing a switch or clicking the mouse. Children unable to hold a pencil, crayon, or paintbrush can use "The Studio" to recreate images targeted at their developmental level with switch presses. As children print the pictures the excitement of seeing the printed product prompts sharing and increased communication efforts. A single child or a group of children can take turns drawing in "The Studio."



Teacher's Role

Create an artist's environment by displaying reproductions of adult artists' works and originals of children's work. Position the monitor at the child's eye level. Prior to booting *ArtSpace*, select a switch setup. Connect the switch to a switch interface, Discover:Kenx, or IntelliKeys. Open the program *ArtSpace* and select "The Studio." Under "Settings" select one switch. Test the switch with the program before the children come to the computer center to make sure it is activating properly. Arrange the computer center so several children can gather around the computer monitor. To limit distraction, cover the pieces of equipment not being used by the children.

Outcomes

Children will become aware that their actions cause certain events to happen. Children will become aware that pressing the switch is causing the actions. They will attend to the task at hand; activating the switch while focusing on the actions displayed on the monitor.

Children will observe the actions on the screen and figure out that their physical actions control the actions on the screen. They will increase their attention span. Children will collect information about the different functions of the program in "The Studio."

Children will examine the features of "The Studio." They will propose explanations, such as "The picture has two more turns to do before it's finished." Children will take turns making choices while activating the program.

continued on page 10

ArtSpace Studio continued from page 9

Children will use the knowledge gained from this experience when looking at other art work. They will use the sequencing skills learned through "The Studio" in other learning situations. Children will develop increased knowledge of patterns and symbols.

Materials needed

- Macintosh LC computer, System 7 or later, 4000K of free RAM memory
- CD-ROM Drive
- 14" monitor or larger
- *ArtSpace*
- Switch
- Switch interface, Discover:Kenx, or IntelliKeys
- Color Printer

Procedure

The child-created collection of images in "The Studio" are arranged in groups of three according to Kellogg's basic developmental stages. "The Studio" consists of a Studio Palette screen and a Studio Canvas screen. From the Studio Palette, children can select the most appealing drawing. The program then moves to the Studio Canvas where the drawing is revealed, a few segments at a time as a switch is pressed and as music plays. On the bottom of the canvas frame are four markers to indicate the drawing's progress. An unfinished marker indicates that a segment or more of the drawing is unfinished. A finished marker is indicated when the drawing has been complete. When all segments are complete, selecting the Canvas causes the picture to be drawn in its entirety. Children can interact with elements of selected drawings or paintings as slowly or quickly as desired. Drawing these images is simulated by pressing the switch repeatedly until the complete image appears. Children will also enjoy revealing the "hidden picture" section by section.

Adaptations

- Place monitor on the floor if the child is positioned on the floor.
- Use a TouchWindow to create simulated drawings if the child is unable to use the mouse or a switch.
- When using a switch, secure it in a switch holder to provide a stable position for activation.

Related Activities

- Draw using low-tech materials such as a Magna Doodle with adaptive magnetic drawing tools.
- Introduce children to other switch activated software programs such as *Switch Intro* (Don Johnston, Inc.) or *New Frog & Fly* (SimTech).

Supporting Diversity

Three Birds and a Fruit Bat

by Letha Clark

The words "blended family" once unfamiliar and rarely used, are quickly becoming part of our everyday vocabulary. More and more young children are members of blended families. The nuclear family is blurring as the blended family comes in focus.

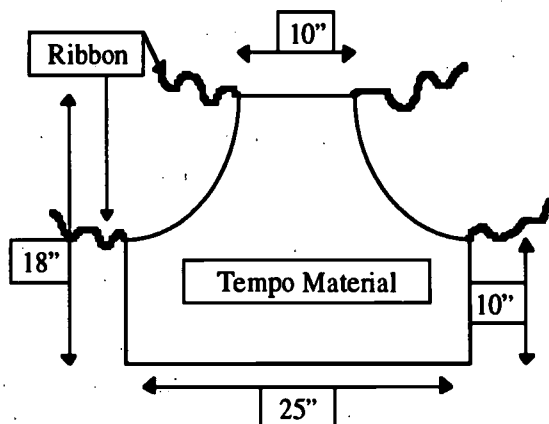
The story of *Stellaluna* is a story of a blended family. On an evening flight in search of ripe fruit, little Stellaluna falls from the safety of her mother's breast. She eventually lands in a cozy nest full of bat-like-strangers. Over time, the three little birds and Stellaluna became good friends, each accepting the differences between them and eager to try new ways. Fruit bats don't eat bugs, but Stellaluna ate them. Birds don't fly at night, but the trio tried it. Bats can't land gracefully on a branch, but Stellaluna gave it her best shot. Birds don't sleep upside down, but the birds tried it anyway. It didn't matter that they were so different. What was important to Stellaluna and her friends was that they were really very much alike.

This gentle story is another of the Living Book series by Brøderbund and is a dual platform CD-ROM. *Stellaluna* would make an excellent addition to a software library and a wonderful guide for children as they recognize the differences and, more importantly, the similarities of members in blended family.

Communication Apron

by Carol Schneider

The dimensions for this communication apron are designed for the average preschool child. Dimensions can be increased or decreased depending on the size of the child or adult. Tempo* material is recommended. Tempo exhibits great characteristics such as, durability, no pilling, Velcro easily attaches or removes, easy to care for, and is washable.



Materials: Paper for making apron pattern, ruler, marker or pencil, 18" x 25" of Tempo material, pins, scissors, ribbon, velcro, sewing machine/serger - optional

Procedures

1. Start with a 20" x 27" piece of paper. (Old newspaper can be pieced together to make the pattern.) With a marker/ pencil and ruler, create the apron pattern by using the dimensions above.
2. Place and pin the pattern onto the fabric. Cut the apron from the Tempo fabric.
3. Because of Tempo's characteristics, the ends do not need to be finished. However, if you desire, the ends can be finished with a serger or sewing machine.
4. Cut 4 pieces of ribbon for the ties. Check for adjustments. Sew the ties to the neck and back area as shown in the drawing above.
5. Variations of this apron can be made. Depending on child or adult needs, the apron can be made into a tie or vest.

To create icons or symbols for the communication apron, cut simple images from a story or theme and make them sturdy by gluing cardboard or felt to the backs. When working with small children, make the images large and easy for little hands to grasp. Then, glue small pieces of female Velcro to the backs of each image. For texture of the images, the male Velcro can be glued to the front of the images to represent texture such as dirt.

When using the communication apron, introduce the character or object by taking the image off the apron and presenting the image to the child. The child may enjoy playing with the figure as the activity continues. Encourage the child to talk about the image. Using a communication apron will assist a child with sequencing skills or help him/her visually or tactily follow a story. A communication apron can be easily integrated into any computer activity by capturing images from a software program.

*Tempo material is available in a variety of colors and can be purchased from: Lockfast, Inc., 10904 Deerfield Road, P.O. Box 42488, Cincinnati, Ohio 45242, 800/543-7157.

Dramatic Play at the Computer

Editor's Note: The following information was taken from, ArtExpress, a curriculum product of the Expressive Arts Project. ArtExpress will be available this fall.

Children love exploring software. They often become so involved with the characters on the computer that they enjoy reenacting the stories and songs through dramatic play. Adults can capitalize on children's fascination with favorite programs by gathering or creating props to support the children's dramatic play.

Programs such as *Millie's Math House*, *Circletime Tales*, *Just Grandma and Me*, and *Busytown* can easily be carried into the dramatic play area. Create paper versions of the characters in the different software programs by screen dumping a particular screen, cutting out the character, mounting the character on card stock or construction paper and then laminating. The laminated characters can be used for flannel boards by adding a piece of Velcro to the back. A few suggestions for the many ways to use software include:

Millie's Math House: Gather different styles and sizes of shoes and put them in the housekeeping area for "Little, Middle, and Big." Children can try on the shoes to see which fit, and they can also sort them into different groups. See how many different ways the children can find to group the shoes. Another way to extend the software is to print out the shoes and characters from the software. On a flannel board, children can match the shoes to the character. These activities could also lead to a shoe store with a cash register, shoe displays, and salespeople.

Circletime Tales: "The Eensy Weensy Spider" can be reenacted by providing play spiders, a water spout, and the sun. The children could be in charge of creating all of these items. Spiders can

be created with pipe cleaners, the water spout could be cardboard tubing, and the sun could be made from cardboard or construction paper. Create a printed version of the song by using screen dumps and laminating the pages to form a book. The children will enjoy referring to the book as they play.

Just Grandma and Me: Create a beach in the classroom. The beach will need towels, buckets, shovels, empty sunscreen bottles, straw hats, lawn chairs (if there is room), and sunglasses. Play recorded ocean sounds while the children are at the beach. Create a printed version of the story for the children to read as they relax on the beach. Pack a picnic basket with play food for a picnic at the beach.

Richard Scarry's Busytown: After helping "Captain Salty" build his ship and gather his crew, the children might want to take a ride on a pretend ship. Tickets will be needed to board the ship. A large refrigerator box can be painted or drawn on, chairs can be put inside, and then it's out to sea. Food can be served to the travelers. An assortment of different boxes can be used with "The Delivery Truck." Children are encouraged to put items in the boxes and deliver them to the other children in the class or even other people in the building. Band aids, a stethoscope, and a doctor's bag and coat can transform children into "Doctor Diane."

Thinkin' Things: Children can create their own Fripples for "The Fripple Shop." Large storage boxes are used as the shop. The boxes can be cut open down a vertical side and taped together to form an L-shaped back drop. The

children can paint the shop to match the shop on the computer program. A window and door can be painted and a door can be cut open. Use clear packing tape to hinge the door so that the children can open it up to come into the shop. Add simple props such as a small child's table, a play telephone, a play cash register, and the Fripples the children have made.

Using characters from the software in dramatic play is simple. Create a screen dump of the page that has the character you want. Some computers allow only a snapshot of the whole screen while others will allow a snapshot of a designated section of the screens. Refer to the computer's documentation to determine how a screen dump is made. Print out the character, mount it on a sturdy material such as construction paper, then laminate. Once laminated, the character can be used in many different ways. Velcro can be placed on the back of the laminated character to be used on a flannel board. A material called Tempo can be used in place of flannel. Tempo is sturdier, and Velcro attaches and removes easily. The characters will stay in place better than with flannel. Tempo can also be used to create storytelling aprons.

**ArtExpress and Other
New Curricula will be on
display at Macomb
Projects' Exhibit at
Closing the Gap**

• Booth 156 •

Be sure to stop by!

Parents Share Perceptions of Effects of Computers in Preschool Classrooms

by Robert Farley Rippey

For the past two years, Macomb Projects' Early Childhood Comprehensive Technology System (ECCTS) has examined the effects of four interwoven components involved in providing assistive technology to young children with disabilities. One important component has been family participation. Other components provide initial and ongoing assessment, plan-

ning and implementation of developmentally appropriate technology activities, staff development, policy development, and transition. Macomb Projects is working with teachers, technology staff, families, and three to five year old children with disabilities at the Just Kids Early Childhood Learning Center in Middle Island, Long Island.

Macomb Projects staff trained the

Just Kids technical support staff and helped the support staff train the teachers and families in the skills of operating the computers and the teachers in the art of integrating technology into the curriculum. Each of the classrooms participating in the study contains a computer, printer, and software targeted to meet the needs of children in the class. Computers are in use between ten and fifteen hours a week. Usually children work in pairs, but sometimes the computers are used individually. At other times they are integrated into circle time activities. Considerable data on the children's computer use and its effects has been collected via videotapes of classrooms, interviews, and the administration of questionnaires.

Families participate in project activities in various ways. Some families have visited the classrooms, while others have attended computer workshops. Just Kids staff conduct workshops to familiarize families with the computers, the software, the activities their children participate in, and the ECCTS project in general.

In May 1997, we asked parents for their perceptions and evaluations of 10 objectives of computer use: to encourage playing with others, communication and language development, learning in a different way, working independently, building self confidence, problem solving, exploring, understanding cause and effect, socializing and turn taking, and focusing attention.

Thirteen parents agreed to be interviewed. All of them reported that seven of the ten objectives had been accomplished. One parent believed that her child had not improved in playing with others. One felt that her child did not

continued on page 14

Software Review

Brøderbund 'Does It Again' with Arthur's Reading Race

by Letha Clark

Many of us have eagerly awaited each new software title in the Living Book series (Brøderbund) since we first tried the popular *Just Grandma and Me*. Young children quickly adopted *Harry and the Haunted House* as a classroom favorite. We were thrilled that *Dr. Seuss's ABC* was so unpredictable. And we were in awe as the beautiful story, *Stellaluna*, unfolded as a Living Book.

Now we have the opportunity to discover *Arthur's Reading Race*, by Marc Brown. In this tale of brother and sister, D.W. proves her reading prowess to a doubting Arthur. We are familiar with the antics of Arthur and D.W. and see minor incidents of sibling rivalry. Arthur is very gracious as he realizes that indeed his little sister's reading ability extends beyond the environmental print that "doesn't count," and he has to make good on his bet.

Listen after clicking the "Read to Me" button or interact after choosing the "Let Me Play" option. The hot spots we expect are present on every page of this story. Click on a hot spot to

produce a reaction that may be a surprise or may support the development of the story. Click on the "Option" button to access individual pages of the story or to play one of six games. Three "I Spy" activities encourage identifying an object from the auditory clues and the printed word. Three "Let Me Write" activities make use of partial sentences which can be added to and changed by dragging objects from the background into the sentence. The "I Spy" and "Let Me Write" activities are embedded in the story and can be accessed while in the "Let Me Play" mode. Choose the "Race" to play a board game with another player or against the computer. The "winner" picks an ice cream cone flavor from choices such as Bumpy Road, Slug Crunch, and Toenail Crackle. Those choices are probably not an inducement to rush to the nearest ice cream parlor.

Arthur's Reading Race promises hours of opportunities for young children as they discover and explore independently with Arthur and D.W.

Parent Perceptions continued from page 13

understand cause and effect, and two saw no improvement in their children's problem solving. Parents reported their children being more social at the computer. One parent commented that her daughter had learned how to take turns. Another commented, "It's really amazing how well my children do...I would never have tried the computer. I thought they were too young to understand, but they do."

When asked, "Why did you want your child to participate in the study?" parents' responses were general. The majority indicated they believed the computer would be helpful to their children, and that was enough for them. No one had negative comments about their children using a computer. While only four of the thirteen parents interviewed reported having computers at home, three others indicated that they planned on buying one in the near future. Several parents mentioned they had not realized how much their child could do until they saw him or her working at the computer.

Some of the activities that the parents were aware of their children doing with computers were: making books, reading stories, singing along with the songs on the programs, playing pre-school games on the computer, working on the Living Books such as *Just Grandma and Me*, learning songs, and learning about shapes.

The parents interviewed have a great deal of trust in the computer's ability to help their children. If this is generalizeable, persons attempting to set up programs for using the computer to help children with disabilities will have a solid base from which to build. The findings of the ECCTS study should then help them over the humps.

ECCTS is funded by USDE's Technology, Educational Media, and Materials for Individuals with Disabilities Program. PR#H180U50039.

Have Fun with Busy Tunes in *BusyTown*

by Amy Betz

Busytown is a popular children's software program. One of the features of the software *Busytown*, is the jukebox of "Busy Tunes." Some children love to listen to and sing along with the songs. Twelve songs, associated with the activities of *Busytown* are found on the jukebox. The songs use a variety of musical styles, including country, reggae, calypso, and rap. The words to the songs are found in the manual accompanying the CD-ROM. However, there are some differences between the written words and the words as they are sung in the program, so listen carefully to the songs. Here are a few ways to turn your classroom into a *Busytown*!

Create screen dumps of the frame of the house along with the equipment and furnishings of the house. You can enlarge the screen dumps in *ClarisWorks*. After the images are printed, laminate them and apply self-stick, looped Velcro® to the back of the images. The images are now ready to be used on a flannel or felt board. Pass out the images to the children during group music time, near the computer center. As the song, "Building the House" is played, the children can put their images in the appropriate places. The images and flannel board can be left in the area to use during free choice time.

Make a collection of the food found in "Bruno's Deli." If singing the song at group music time, the children can hold up the appropriate food as it is being mentioned. Use play food props to recreate "Bruno's Deli." An added activity could be to make sandwiches for snack or some of the other goodies found in the Deli.

Items to be used in "The Delivery Truck," can be created from screen dumps. Create matching items for the screen dumps in "The Delivery Truck"

and use a truck or suitcase for the children's deliveries. Make screen dumps of the stores so children can match the delivery item to the store. Create a maze in the classroom with safe obstacles for the children to manipulate around when making their deliveries. When singing the song, you can pretend to fasten the seat belt and swerve around the garbage cans and potholes.

Phrases of the song can be programmed into a Cheap Talk or other portable communication device so children with limited language skills can participate in the singing during music time. The adaptive device can be set up with just one phrase if the child is just learning how to activate a switch. The teacher or program assistant can cue and assist the child (if necessary). If the child is more advanced in switch progression, different phrases can be recorded for each area so the child can join in more activities.

Technical Support

Got a problem with your Macintosh? Just pick up the phone and call the Apple support line! No, wait. First, you'd better check the purchase date of your Macintosh. If you bought your Mac between April 1, 1993 and April 1, 1996, make that call! Apple will provide you the promised "life-time support."

However, if your Mac was purchased after April 1, 1996, you may be out of luck. Free technical support is available for such computers for only 3 months. After that, be prepared to pay for answers to your questions. You can contract with Apple for 10 service calls a year for around \$70.00. That's \$7 an incident or under \$6 a month, not much when you break it down; unfortunately, the bill has to be paid all at once.

LEAD LINE Offers Information to Parents of Children with Hearing Loss

LEAD LINE, a toll free hot-line of the House Ear Institute, offers information to families of children with hearing loss. The purpose of the program is to assist families in making confident, well-informed decisions on issues integral to raising and educating a child with a hearing loss.

Barbara Lincoln, Coordinator of LEAD LINE, has compiled a wealth of information and personalizes her responses to callers' needs. Among topics covered are hearing health, advocacy, communication methods, education, research, and technology.

LEAD LINE toll-free numbers are 800/287-4763 (CA only) and 800/352-8888 (all other states). Barbara Lincoln's e-mail address is blincoln@hei.org. Information is also available on the House Ear Institute web site. The URL is www.hei.org

Attending Closing The Gap?

**Stop by the Macomb Projects Booth (#156) in the Exhibit Hall
Oct. 22 - 25**

Check out our new Expressive Arts, Literacy, and Technology Curricula

Calendar of Conferences

September 19-20, 1997: Creating A Vision for Tomorrow's Future: Early Childhood Conference in Carbondale, IL Contact 618/536-7751.

September 22-24, 1997: 5th Annual Technology and Inclusion Conference in Austin, TX. Contact (fax) 512/891-9288.

October 2-3, 1997: Wisconsin Conference on Augmentative Alternative Communication and Assistive Technologies in Eau Claire, WI. fax 715/836-5971.

October 8-10, 1997: Sharing A Vision: Imagine the Possibilities. Early Childhood Conference in Springfield, IL. Contact 217/824-4776.

October 16-19, 1997: Florida Assistive Technology Impact Conference (FATIC '97) in Orlando, FL. Contact Mary Stoltz, 813/781-1239.

October 23-26, 1997: 15th Annual Closing the Gap Conference, Microcomputer Technology in Special Education and Rehabilitation in Minneapolis, MN. Contact 507/248-3294.

October 30- November 2, 1997: Exceptional Parent Annual Conference in Arlington, VA. Contact 203/747-6518.

November 2-4, 1997: 1997 Pennsylvania Assistive Technology EXPO in Hershey, PA. Contact 717/774-5455.

November 13, 1997: 5th Annual Assistive Technology Expo '97 in White Plains, NY. Contact 914/285-7364.

November 13-16, 1997: TEL•ED, ISTE's 6th International Conference on Telecommunications and Multimedia in Education, in Austin, TX. Contact ISTE, 1787 Agate Street, Eugene, OR 97403.

November 20-23, 1997: American Speech-Language Hearing Assoc. 1997 Annual Convention in Boston, MA. Contact 301/897-5700.

November 20-23, 1997: International Early Childhood Conference on Children with Special Needs in New Orleans. Contact DEC, 3 Church Circle, Suite 194, Annapolis, MD 21401.

December 10-13, 1997: TASH Annual Conference in Boston, MA. Contact 410/828-8274.

March 9-11, 1998: Midwest Education and Technology Conference in St. Louis, MO. Contact <http://info.csd.org>

Web Site Promotes Family and Education Issues

Persons interested in family and educational issues will enjoy The Family Education Network (FEN). This web site is dedicated to helping parents become more involved in their children's education. FEN was founded seven years ago to help children succeed in school and in life.

Reinforcing the connection between schools, families, and communities is one of FEN's goals. It provides educational resources, product discounts, and opportunities to become involved in

legislation.

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How Five Preschool Children with Autism Responded to Computers

by Patricia Hutingger and Robert Rippey

If adults provide interesting, interactive software, preschool children respond with attention, enthusiasm, and often gain computer skills quickly. Given conducive conditions that include adequate time and adults who can sit back and wait for children to respond, we find that children who exhibit autistic tendencies also respond positively. This paper reports on a year's progress of five boys and their interaction with computers. Labels vary, whether MSD (Multi Sensory Disorders), PDD (Pervasive Developmental Disorder), or Autism. Whatever the label, the five boys did not respond to the world with behaviors that parents and educators typically expect from preschoolers.

Although autism was not specifically selected for attention in the original study¹, the five children reported here called attention to themselves because of similar, distinctive improvements during seven months' exposure to and use of computers. Moreover, we have observed similar results in other preschool classroom sites where children with autistic tendencies interacted with computers.

Comprehensive case studies on each child, developed as we observed the children closely, were part of a larger study of a comprehensive system of technology. The Early Childhood Comprehensive Technology System, or ECCTS, was intended as a replication for several of Macomb Projects'

models: a technology assessment model (TTAP: Technology Team Assessment Process); a service delivery model (ACTT: Activating Children Through Technology); a family and personnel training model (TIP: Technology Inservice Project and ACTT); and a transition model. Of particular interest are the activities in ACTT and personnel training.

Our colleagues were teachers, administrators, and technology support staff at the Just Kids Learning Center in Middle Island, Long Island, New York. The school contained a wealth of clinical and therapeutic personnel and facilities. The classrooms were integrated, having about two-thirds day care children and one-third children with special needs. Each classroom had both a special education and an early childhood teacher. The teachers were well trained and closely supervised.

During the first year of the study, 16 children with disabilities in five classrooms comprised the mixed study population. At the outset, we did not ask for a certain number of children with a particular disability. However, it was clear very early on that the computer had a remarkable taming effect on the children diagnosed as autistic. Two boys were in one of the larger classrooms having a 12 to 1 student/teacher ratio and three were in a smaller class, having a 6 to 1 student/teacher ratio. Two individual aides were as-

signed to each classroom to prevent the children from hurting themselves and others.

What Did We Do?

Program staff at Just Kids received initial and ongoing computer training from Macomb Projects staff at two to three month intervals. In addition, a technology support team at Just Kids was trained to provide daily support and new ideas for classroom teachers.

The ACTT Curriculum, which emphasizes independence, problem solving, and exploration, was implemented at Just Kids in the late fall of 1995. The computer center, available for use at all times, is viewed as one of the many centers in an early childhood classroom. Macintosh computers are used with color printers, TouchWindows, switches (when appropriate), and related adaptive input.

A wide variety of interactive software is associated with classroom themes and activities and is integrated into the curriculum. *KidDesk* is used to manage the computer desktop. Children work alone or in groups during free play and at other choice times. Favorite programs emerged such as *Ruff's Bone*, *Harry and the Haunted House*, and *Just Grandma and Me*.

What Did We Learn?

Our learning came from observing the children closely over an extended period of time. What seemed at first to be a bizarre behavior turned out to be a means of communicating something

continued on page 3

From The Editors. . .

by Linda Robinson

As we madly rush forward at high speed through this information or communication age, we need to take time to stop and really look at all of the things in our environment that have been made by computers. Some of the products are obvious, such as the printed words on letters, articles, and memos. Even signs and banners in the hallways are recognizable as computer products. But how about children's photographs or drawings hanging on the classroom walls? Were the photos taken with a 35mm camera? Are the drawings done with markers or paint? Look again; they may have all been printed directly from a classroom computer.

As computers become more sophisticated, the technology products begin to blend more and more into our environment. Even placemats of children's artwork may be computer products. We take so much of the technology today for granted. It surrounds us, makes our lives a lot easier, and most importantly insures successful experiences for many children. Although it may seem like a luxury for us as adults to be able to print life-like images on the computer, for young children it is more of a necessity. The computer is a wonderful tool to help children bring familiar objects and people into their school environment. And since young children may have difficulty understanding abstract images, the use of photographs or real time video has even more impact on this population.

In this issue we have provided several examples of ways to use software, such as *Kid Pix 2* and *Kid Pix Studio* to create high quality products. Programs, such as these, provide seemingly endless options for drawing and producing artistic creations which young children themselves can do. After every child has made his/her own picture, a class slide show can be put together for the children to enjoy. The slide show is also a big hit for open house night. Parents are usually quite impressed by what the children made with the computer. Images can be printed and sent home for sharing with other family members.

Another personalizing technique that takes advantage of the computer's picture importing abilities is the placing of children's photos into Kid Desk. The procedures are included for you here. Children really enjoy finding their photo and clicking it to get to their desktop. If you aren't already using this desktop management program, you should consider it. This program provides a wonderful way for children to use the computer independently. The photos just add a personal touch that again is almost essential for younger children.

Other ways in which technology can be used to individualize or personalize activities for children is through *HyperStudio*, an authoring program which all of the Macomb Projects staff know and love. Many of the benefits and applications are discussed here. It is a versatile tool for promoting literacy skills at any age, but especially applicable for emergent literacy in young children. If you would like to learn more about using technology for these skills, we are now offering training through our new LitTECH Interactive Outreach Project. Information on this and our other new and continuing projects can be found in this issue. We are also proud to announce the birth of our triplet curricula, *ArtExpress*; *eMERGING Technology and Literacy: Working Together*; and *Building InterACTTive Futures*. Although they may have come out of the printer about the same time, they are each unique and well worth considering for classroom or home activities.

So there you have it—training, curriculum, what else could you want? A written testimonial that technology really makes a difference? Well, we give that to you also in our story of five children from Long Island. Read our cover story about the difference a classroom computer made in the lives of these young children with autism. You may then be ready to stop and appreciate the technology around you. As you do, don't forget to take time to visit the Macomb Projects' Web site—www.mprojects.wiu.edu.

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How Five Boys continued from page 1

which the children understood but was unintelligible to us. When we interpreted their messages correctly and responded effectively, the children had their own ways of telling us, "By George, I think he's got it!"

Once the children recognized that computers and software were potential helping tools to meet their own individual needs and desires, positive behaviors emerged. In order to utilize the computer effectively, the children had to communicate and socialize. Prior to computer exposure, the boys were likely to scream, fall to the floor, resist adult assistance, throw books into pudding bowls during cooking activities, run around the room aimlessly, and refuse physical contact. That is only the beginning.

After the boys used a computer in their classes, we saw an entirely different cluster of positive behaviors. They socialized, shared, communicated, and learned at the computer. One child taught himself to read and spell words. Clearly, when the boys viewed the technology as an interesting activity and trusted the computer to respond consistently to their commands, then communication became essential to the child. This is perhaps the most notable accomplishment of the computer.

Some of the things we observed follow.

1. The five boys first became curious about and unafraid of computers.
2. They initially watched other children use the computers, from a distance.
3. Some boys liked a bit of privacy when they first tried on their own.
4. They first made the erroneous conclusion that the computer belonged to them and no one else but this is true of almost any preschool child.
5. The boys were likely to repeat interesting events in single frames or hot spots and add their own. The distinc-

tion between perseveration and engaged repetition constitutes a fine line. This behavior may annoy some teachers. However, with patience and encouragement, the child WILL move on. It may take a week or so. Don't push too hard.

After the boys used a computer in their classes, we saw an entirely different cluster of positive behaviors. They socialized, shared, communicated, and learned at the computer.

6. The boys were quick to learn how to use the computer and to select appropriate software.

7. They ultimately learned to socialize and share.

8. They did not like circle time. Perhaps this provides a clue and a direction to improve the content of large group activities. Weather and the days of the week are hardly appropriate content for preschoolers, no matter how sacred such content may be in teacher education.

9. The boys talked to the computer, then they talked to people.

10. Over time, the boys needed less individual intervention and eventually got along without personal aides.

11. All five boys demonstrated increased attention span when they were using computer software alone or with other children.

Why did appropriate computer activities help these children make a bold step forward? We would suggest the following reasons.

1. A computer running appropriate software is consistent—more so than any parent or teacher could ever hope to be.
2. If everything is working and the software is appropriate for the particular child, the computer will deliver no unwanted surprises.

3. Software is interesting, responsive, interactive, and presented in more than one mode, appealing to varying interests and sensibilities.

4. The computer cannot harm the children. This may be the reason why they like to watch other children using it before they try it. They want to be sure that it is safe.

5. The child has complete control over the computer (if his teachers allow it).

Control is something we all like, but it is especially liked by children with autistic tendencies because they seldom feel power.

Using computer activities requires that we do more than provide equipment or software. It must be individualized, incorporated into the total curriculum, and emphasize spontaneous interaction and independent functioning. Computers are not cure, but they can make a difference if used with wisdom and wit.

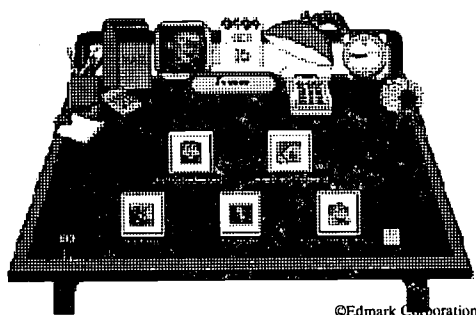
We are suggesting a possible experience for autistic children which may be worth trying. If you have similar experiences, please share your data with us. Personnel at Just Kids were sufficiently impressed, and this year, they have placed all 16 of the children diagnosed as autistic into four integrated classrooms. We are collecting additional data on the children and will have more to report a year from now. In the meantime, if you are persuaded by our argument and want to try our methods, you may obtain additional suggestions by writing to us at Macomb Projects (Room 27, Horrabin Hall, Western Illinois University, Macomb, Illinois, 61455) or visiting our web site (www.mprojects.wiu.edu).

¹The study was conducted by staff of The Early Childhood Comprehensive Technology System, funded by the U.S. Department of Education, PR# H180U50039. The opinions expressed are those of the authors.

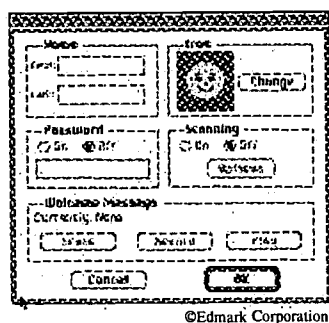
Import a Child's Photograph on *KidDesk*

by Judy Potter

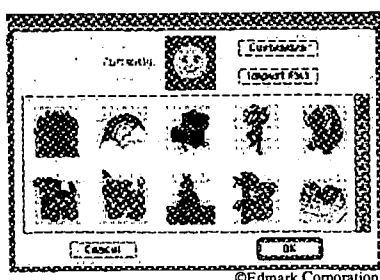
KidDesk™ gives children a place of their own on the computer—a personalized, colorful desktop that lets them launch their own programs but keeps them out of adult programs. Fun desk accessories include a 13 month calendar, a calculator, a message machine, and a talking clock.



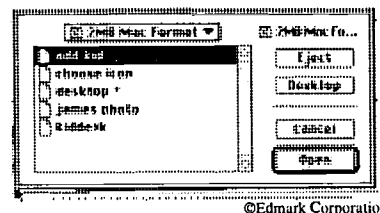
Although *KidDesk*™ has many icons to choose from, most children like seeing their own photograph displayed on their desktop. Importing the photo is easy to do. Scan a photograph of the child and save it as a PICT file. A PICT file is a specific kind of file created by a paint or graphics program (like *Adobe Photoshop*™). Use the child's name to name the file.



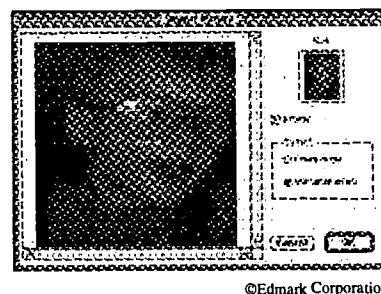
- Access the adult section by holding down "Option," "Apple," and "A." Use the "Kid Menu" to add a kid. When the "Add Kid" menu comes up, click "Change." You will get a box that will say "Import Pict." Click "Import Pict" to import the PICT file of the child's photograph.



- Select the name of the file, then click "Open." The "Import Picture" dialog box will appear. Use it to select the area of the file you want to use as an icon. There are two options:



1. **Fixed Area:** Drag the icon-sized box over to the area you want to use (releasing the mouse button selects the area).
2. **Variable Area:** Drag to draw a box around any part or all of the picture. That area is reduced or enlarged to fit into the icon frame.



Important Reminders:

- Normally, dragging will be restrained (retaining the correct aspect ratio and avoiding distortion) to fit the picture into the frame.
- If you hold down the "Shift" key, you can drag freely, but the image may be distorted when fit into the frame.
- Use the "Dither" check box to maintain color consistency when reducing or enlarging images with the "Variable Area" option.

Not only does *KidDesk* protect your computer's hard drive and important files from being accidentally trashed or renamed by children, but *KidDesk*'s design also enables children to use the computer independently, to explore, experiment, make decisions and take risks. When preschoolers use their personalized *KidDesk* desktop, they gain confidence and self-esteem.

KidDesk™ is a trademark of Edmark Corporation
Adobe Photoshop™ is a trademark of Adobe Systems, Inc.



Curriculum ACTTivities

Editor's Note: The following curriculum activity is taken from *eMERGING Literacy and Technology: Working Together*, the new interactive technology and literacy curriculum developed at Macomb Projects. See page 10 for more information about the product.

***Kid Pix Studio* Encourages Creative Thinking, Expression**

Brøderbund's *Kid Pix Studio* is a program that can be used with any curriculum. It supports children's creative thinking and encourages free expression. Children can use a variety of items to tell a story, draw a picture, make a SlideShow, or add stamps.

The icon menus (Paint, Draw, Stamp, Mix-up, Move, Erase) make *Kid Pix Studio* friendly for all children. Click a tool for immediate access to another menu bar displaying many options for that particular tool. Sound effects, in English or Spanish, are included with all choices. Use the Option and Shift keys in different combinations with over 1,300 stamps and enlarge and shrink stamps to different sizes. Use the same keys to obtain different effects with the painting tool. Children can use multi-color fill patterns and an assortment of fifty wacky brushes to paint. Children can start a new project using over a dozen different erasers, the bomb being most children's favorite. Question marks often turn into colorful surprises. Add letters and numbers to art projects with the text tool which offers a large selection of attributes. Sound (recorded or taken from the sound library) can be added to creations and the entire product can be saved. Select from four printout options, tiny to regular.

Use the SlideShow feature (see page 12 for more information) to display a collection of art complete with snappy transitions and amusing sounds. Older children can create their own animated stories, photo essays, or school presentations with the SlideShow feature. *Kid Pix Studio* offers many ways for children to express their creativity using the other art projects provided in the program. Children can choose Kid Pix, Moopies, Wacky TV, Stampimator, or Digital Puppets. If a child can point and click a mouse, that same child will enjoy *Kid Pix Studio* for hours and hours. The software program encourages creative expression in children of all ages.

The program requires a Macintosh, System 7.0.1 or higher, a CD-ROM drive, a color monitor with 256 colors or larger, and 4MB of RAM or an IBM or compatible 386DX processor or higher, Super VGA monitor, 256 colors, 640x480 MHz or faster, 4MB of RAM required but 8MB of RAM recommended, Windows 3.1 or Windows 95, and a CD-ROM drive.

Optional items are external speakers, microphone, kidDraw Tablet, TouchWindow, or color printer.

Materials

- Computer
- *Kid Pix Studio* (Brøderbund)
- Books in the reading area about artwork, artists, and creativity
- A wide range of art materials in the writing and/or art center

Introductory Activity

Create a large mural using a variety of paints and brushes, crayons, markers, stamps, stickers, sponge shapes (letters and numbers), and finger paints. A variety of paper could be used from newspaper to textured wallpaper.

Computer Activity

- Save children's art work throughout a one to two week period. Print out one picture for each child (let the child choose), glue to construction paper, and laminate. Use as the child's placemat for snack time.
- Connect the Quick Cam to the computer, using it in the Wacky TV portion of *Kid Pix Studio*.
- Draw pictures in the Moopie section, open the pictures into the SlideShow creating a moving picture show.

continued on page 13

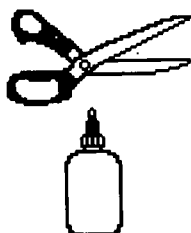
CURRICULUM INTEGRATION IDEAS

COOKING/SNACKS



- Offer a variety of snack foods (pretzels, crackers, Twigs, and cheese balls). Mix a firm dip with cream cheese, sour cream, and french onion dip mix to use as cement to build edible sculptures.
- Blend creative art mixes with an assortment of cereals, candies, dried fruits, and nuts.
- Color milk with food coloring. Use a pastry brush to paint on bread. Toast in a toaster oven and serve "rainbow toast."

CONSTRUCTION



- Make pictures with rubber stamps and stickers.
- Create paper sculptures (roll, crush, and tear paper).
- Make paper.
- Melt crayon pieces and make multi-colored crayons to draw with.
- Construct with found items.
- Set up the woodworking table and construct sculptures with wood pieces.

ART



- Create pictures with Crayola stamp markers on construction paper.
- Set up the easel and provide a variety of items with which to paint (brushes, cotton balls, kitchen utensils, Q-tips) and make several colors of paint available.
- Fill spray bottles with watered-down tempera (washable) paint. Paint on an old sheet.
- Draw with crayons on textured paper (such as newsprint, cardboard, paper bags, sandpaper).

SENSORY

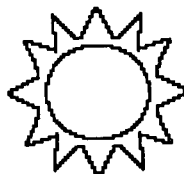


- Finger paint with different media. For variation, paint with elbows, feet, and toes.
- Explore textures of different sculpting materials (sawdust, play dough, silly putty, or modeling clay).
- Put shredded paper in the sensory table and provide craft scissors, hole punches, shape punches, toilet paper tubes, and paper towel rolls.



SCIENCE/MATH

- Create patterns with rubber stamps.
- Plan a study of colors, experiment with mixing colors.
- Experiment with erasers. Provide a variety of eraser types. Try erasing different mediums (paint, pencil, pen, chalk).



OUTDOOR PLAY/MOTOR

- Take a nature walk and gather items for nature sculptures.
- Paint with water and large brushes on sidewalks, building walls, fences, or blacktop.
- Use crayons and draw on mural paper with toes. Children can put crayons between toes and make large movements.
- Move the Wacky TV outside and the children can incorporate wheel toys and outside equipment into their dramatic play.
- Fill spray bottles with colored water (food coloring) and paint on snow.



GROUP/INDIVIDUAL STORY EXPERIENCES

- Read *Ruby the Copycat* (Rathman) with the children. Ask them to act out the story. Provide props.
- Conduct an art appreciation lesson. Read *Visiting the Art Museum* (Brown & Brown). Ask children to share their thoughts and ideas about the different art styles. Make a graph of the children's favorite art styles.

EXTENSIONS BEYOND THE CLASSROOM



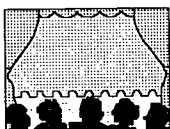
- Visit an art museum.
- Visit a local artist and his/her studio.
- Take a field trip to a local commercial artist's office.
- Invite the high school art teacher to conduct a mini-lesson with the class.



FAMILY CONNECTIONS

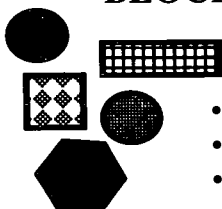
- Invite families to the grand opening ceremony for the Class Artist Gallery. Make snacks to serve. Have a ribbon cutting ceremony and invite families to cut the ribbon.
- Ask parents to donate materials for art projects.
- Invite family members to visit the classroom and share their artwork. Display art projects in the gallery's featured artist exhibit.

DRAMATIC PLAY



- Design an art gallery where artists create and display their works for sale. Provide a selection of materials for creating artwork, including props such as workshirts, hats, easels, tables, pedestals, frames, mats, plaques, and cloth for drapes. Provide a computer in the art gallery for children to make computer artwork with graphic and tool making programs. Display children's art. Make an area of the art gallery for works of art that are "for sale." Provide a cash register, phone, receipt book, price tags, and play money.
- Make a life-sized *Wacky TV* using an appliance box with a large section cut out. Children can add control panels and knobs. Place a curtain across the screen with an opening to move back and forth. Children can pretend they are on TV. Other children can sit in front of the TV as the audience.

BLOCKS/MANIPULATIVES



- Build sculptures from wooden blocks.
- Display posters of famous sculptures.
- Add materials to decorate blocks (fabric scraps, feathers, ribbon, and yarn).
- Use puzzles of famous artists' work.
- Build creations with manipulative toys (such as Legos and FlexiBlocks).



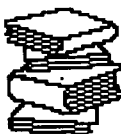
LITERACY LINKS

- Name the classroom art gallery and make a sign for it.
- Make plaques for artwork with the name of the work, the artists' names, and the dates the art was created.
- Write receipts for the "sales" of art.
- Make price tags for the artwork; make an open/closed sign; make a sign for the hours of operation of the gallery.
- Name the Wacky TV and make a sign for it.
- Label the art materials in the art gallery.



RELATED SOFTWARE

- *Amazing Writing Machine*
- *ArtSpace*
- *Crayola Art Center*
- *E*A Kids Art Center*
- *Kid's World*
- *KidWorks Deluxe*
- *Playskool Puzzles*
- *The Art Lesson*



RELATED BOOKS, POEMS, STORIES

- *Cherries and Cherry Pits* (Williams, V.)
- *Lucy's Picture* (Moon, N.)
- *Monsters* (Hoban, R.)
- *Ruby the Copycat* (Rathmann, P.)
- *Sweet and Sour Animal Book* (Hughes, L.)
- *The Art Lesson* (de Paola, T.)
- *The Christmas Alphabet* (Sabuda, R.)
- *Visiting the Art Museum* (Brown, L.K. & Brown, M.)

HyperStudio, An Affordable Software Alternative

by Carol Bell, Letha Clark, and Joyce Johanson

For the past three years, the early childhood technology staff at Macomb Projects have investigated *HyperStudio* as a literacy tool for the early childhood classroom and have found it to be helpful for developing emergent literacy skills such as language, emergent reading, and early writing development. Stacks were created by our staff and classroom teachers, with input from children and families in the form of ideas, photos, drawings, and sounds. *HyperStudio* was used to relive family and classroom experiences, to retell familiar stories, to author new stories, and to reinforce and facilitate learning activities and experiences at home and in the classroom.

Reliving experiences, such as a classroom field trip to the fire house, involved incorporating recorded images, such as children's original works of art, photographs (scanned photographs or digital images), video, and images created with children's software programs or the paint tools found in *HyperStudio*. Children were involved in selecting the images and relating descriptions of the event which an adult typed using the text tool found in the *HyperStudio* toolbox. The addition of auditory stimuli, in the form of speech, music, and sound brought the event to life once again. Children's knowledge about their environment and community was expanded as they had the opportunity to reconstruct events and then reexperience those events each time they used their *HyperStudio* stack.

HyperStudio also provided a framework for children to retell favorite stories. After reading and hearing stories, children retold the stories in individual or cooperative stacks. They developed their own version of the story, com-

plete with original images and storyline. Activities such as this supported cognitive development as children discussed ideas, made decisions, and combined illustrations and text.

Independence is fostered when children use a *HyperStudio* stack designed to facilitate activities. Adults can create a stack that makes use of photographs, text, and speech to guide children. Activities that are generally adult directed can be transformed into projects children can accomplish independently. Cooking activities are frequently adult directed. By using *HyperStudio* and incorporating photographs of utensils and ingredients, a written and verbal recipe, photographs and video of stages in the process, and clues, tips, and suggestions adults can produce a child-friendly stack. Transferring responsibility from the adult to the child promotes cooperation, discussions, and socialization.

HyperStudio is a product oriented program, but children are heavily invested in the process involved in creating *HyperStudio* stacks. Children can be involved in initial planning, gathering materials, discussing content, making decisions, implementing ideas, and producing a stack with very little assistance from adults. Our experiences demonstrate that even very young children can be actively involved in each stage.

Initial planning may involve a brainstorming session with children in a search for possible topics, ideas, and design. Gathering materials may include taking photographs, producing images, dictating or composing text, and videotaping. Discussing content involves all the children as they make decisions about the gathered materials,

continued on page 12

When a *HyperStudio* stack is being developed, adults should

(a) consider the original objective of the stack: Does it serve the purpose for which it was intended at the outset? Is it appropriate for the audience? Is it visually and auditorially attractive?

(b) review the opportunities for potential learning: Does it provide opportunities for interaction? Does it inspire children to explore? Does it encourage children to solve problems?

(c) evaluate the graphics: Was the integrity of child produced images maintained? Were they drawn by children or by adults? Are images from classroom experiences and field trips incorporated? Are children fairly represented?

(d) assess the sounds contained in the stack: Are children's voices incorporated? Did teachers, families, support staff, therapists contribute to the audio recordings? Have techniques been used to preserve sound quality?

(e) consider the design of the stack: Are there buttons on every card? Do the buttons cause an action? Who contributed to the process of developing the stack? Is the stack usable without additional instructions?

Although all of these questions are not applicable to every stack created, all are important considerations for evaluating the product as it progresses through various stages toward completion.

What's New At Macomb Projects for 1997 - 1998?

Macomb Projects, part of the Elementary Education/Reading Department in the College of Education and Human Services at Western Illinois University, recently received notification of new federal grant awards from the U.S. Department of Education for 1997 - 98. The new projects are described below:

Expressive Arts Outreach will provide training to families, teachers, support staff, and early childhood decision makers so they can effectively use developmentally appropriate art activities for young children with disabilities and implement appropriate adaptations for children with severe disabilities. The focus of this outreach project is visual arts, although *ArtExpress*, the curriculum Macomb Projects developed as a result of the model development project on which this outreach project is based, also emphasizes activities in music, movement, and dramatic play. Funding for Year 1 of this three year project is \$139,996.

LitTECH Interactive Outreach intends to replicate a developmentally appropriate interactive technology literacy curriculum model into early childhood special education programs serving children ages 3 to 6 with mild to moderate disabilities. Training content includes emergent literacy, design and management of the classroom computer center to support literacy concepts, choosing children's software, and using *HyperStudio* to create software that connects children's real life experiences to learning. The Project's curriculum will eventually be available on CD-ROM. In addition, the project will support an interactive web site for children. Funding for Year 1 of this three year project is \$139,998.

TEChPLACES is a collaborative effort among six entities: Macomb Projects and teachers in four school districts (Colchester, Industry, Macomb

and Northwestern), and the LaMoine Valley Vocational System Program. The Project is designed to foster a state-of-the-art instructional environment that makes full use of the collaborative interaction and communication potential of the Internet and communication technology so that it can be accessed and used by children with disabilities, then replicated for use by others. The two-year project has three components. The first component is a TEChPLACES Internet site which will culminate as a CD-ROM. The second is a TEChPLACES home page on Macomb Projects' World Wide Web site (www.mprojects.wiu.edu) which will contain continuously updated samples of TEChPLACES' activities. The third component is a CD-ROM, *TEChPLACES Construction Kit*, that contains documentation, media, procedures, source code, and a template to replicate the project in other locations with similar or different tasks, content, outcomes, and platforms. At the end of the project, the CD-ROMs produced in Components 1 and 3 will be available as a *TEChPLACES Construction Set*. Funding for Year 1 is \$125,000.

These new projects join other federally-funded projects at Macomb Projects that have received notification of continued funding into 1998. These include:

- 1) **Project ELIPSS**, funded by the U.S. Department of Health and Human Services, to provide nationwide emergent literacy training broadcasts via satellite. Graduate and undergraduate credit will be available during the Spring semester. This \$300,000 project ends in April 1998.
- 2) **The Early Childhood Interactive Technology Literacy Curriculum Project**, funded by the U.S. Department of Education, has received

funding of \$144,000 for its third year. The project combines interactive multimedia software with emergent literacy experiences for children, ages 3 - 6, with mild to severe disabilities.

- 3) **The Early Childhood Comprehensive Technology System**, funded by the U.S. Department of Education, has received funding of \$300,000 for its third year. Macomb Projects collaborates with an early learning center in New York to examine the effects of a comprehensive technology system (technology assessment, teacher training and follow-up support, curriculum integration, policy, and transition).

In addition to our federally-funded projects, Macomb Projects also has a \$780,000 ISBE-funded technical assistance project, known as **STARNET**. The STARNET Regions I and III Project covers nearly half of Illinois, and its staff provide inservice opportunities to families and early childhood personnel through conferences, workshops, training sessions, and monthly satellite broadcasts. The Illinois Early Intervention Credentialing System has recently become part of Macomb Projects' STARNET.

Macomb Projects, established in 1975, is directed by Dr. Patricia Huting, Professor of Early Childhood in the Elementary Education/Reading Department at Western Illinois University. As part of outreach efforts, Macomb Projects provides products, training materials, conferences and workshops. Persons interested in attending replication training or sponsoring a staff development workshop may contact Macomb Projects by phone, fax, mail, or e-mail. Catalogs and complimentary newsletters are available upon request. Call 309/298-1634.

Outreach Project Uses Technology to Develop, Enhance Emerging Literacy Skills

You can participate in an outreach program that combines literacy and technology to support each child's related IEP goals. Four to seven days could change the way you approach your literacy curriculum.

If you are part of an early childhood special education program that serves children ages three to six, we invite you to learn more about Macomb Projects' newest literacy project, LitTECH Interactive.

The LitTECH Interactive outreach program offers training in two segments. The first four modules are presented in a four-day training period. The training modules include

- 1) Building a Firm Foundation for Emerging Literacy;
- 2) The LitTECH Computer Environment;
- 3) Using Children's Software to Support Emerging Literacy Behaviors; and
- 4) Using HyperStudio to Enrich the Emerging Literacy Curriculum.

The second segment is a three-day training that focuses on using adult productivity applications (e.g., word processing, databases, spreadsheets, etc.). This training is optional and would be an excellent choice for teachers who are unfamiliar with computer applications.

LitTECH is currently seeking replication sites which use computers in the classroom, have access to peripheral devices and software, and serve children with mild to moderate disabilities and/or at risk children, ages 3 to 6.

To qualify for replication, a site agrees to participate in the training and follow-up activities, to provide feedback on and additions to the LitTECH curriculum, to collect data and share it with the LitTECH staff, to field test new materials, and to suggest new

activities, adaptations, and procedures.

Sites chosen for replication pay expenses for their staff members to travel to Macomb for training. The training itself is provided at no cost to the school or program. Persons who wish to participate in the training but not as replication sites pay \$300.

LitTECH staff members also offer workshops on the following topics: Emerging Literacy, Software Integration, HyperStudio Applications, ClarisWorks, and Web Site Activities.

Spring training dates for Modules 1 - 4 are January 12 - 15 and March 16 - 19, 1998.

Contact a LitTECH staff member at 888/LIT-4278 or 309/298-1634 for further information.

LitTECH Interactive is an outreach project funded by the U.S. Department of Education's Early Education Program for Children with Disabilities. PR # HO24D70020.

New Literacy Curriculum Now Available

eMERGING Literacy and Technology: Working Together, Macomb Projects' brand new literacy curriculum, offers early childhood teachers a proven-effective curriculum approach for using computers to develop and enhance young children's emerging literacy skills.

The curriculum features reviews of over 30 software programs, each accompanied by suggestions for curriculum integration activities; tips for designing the classroom's literacy and technology environment; guidelines for selecting children's software for literacy; information on customizing activities and adapting technology to meet needs of individual children; ideas for involving family in literacy and technology activities; resources for children's software programs; and references for children's books and software.

The 263-page curriculum sells for \$50.00 plus \$5.00 shipping and handling. Checks or purchase orders must accompany the order. Send orders to Macomb Projects, 27 Horrabin Hall, Western Illinois University, Macomb, IL 61455.

Benefits of Replicating the LitTECH Model

Children are exposed to

- basic emergent literacy concepts
- new learning opportunities
- integrated learning
- communication and social interaction
- positive book behaviors
- drawing and emergent writing activities.

Educators receive

- new learning opportunities
- knowledge of ways children develop emergent literacy concepts using computer technology
- ideas for adapting activities to meet individual children's needs
- suggestions for using the LitTECH Interactive curriculum.

Families experience

- awareness of how emergent literacy skills are enhanced by computers
- increased classroom involvement
- new learning opportunities.

University Credit Available for Distance Learning Class Targeting Emergent Literacy

In May, Macomb Projects received \$333,000 from the U.S. Department of Health and Human Services to continue Project ELIPSS (Emergent Literacy Instructional Programs and Support Service), a Head Start Project aimed at increasing the literacy skills of young children by providing training for teachers, support personnel and family members.

Project ELIPSS is now offering a distance learning opportunity for graduate or undergraduate credit from Western Illinois University during the Spring 1998 semester.

Participants will view six literacy programs and will complete activities relating to the topic of each program. The programs include

1) *Building a Firm Foundation for Early Literacy Development: Language and Literacy Learning*, which provides a framework of ideas about the development of reading and writing that has influenced strategies for emergent literacy.

2) *From Scribbling to "Real Writing: Stages in Early Writing Development* demonstrates the developmental stages of writing and introduces a variety of strategies for promoting emergent writing.

3) *Developing a Literacy-Rich Environment* includes resources and information to enable teachers and parents to evaluate their learning environments with respect to literacy and explains how to enrich those environments to extend literacy activities across the curriculum.

4) *Making Quality Children's Literature Available to Every Child: Choosing and Using Literature* offers suggestions for selecting a variety of lit-

erature with children at home and in the classroom.

5) *The Shared Language Time: Beginning Reading Through Rhymes, Songs, Poems, and Big Books* contains procedures for conducting the shared language time using materials designed to acquaint young children with the functions, forms, and conventions of print. Also included are strategies for encouraging children to respond to literature through a variety of hands-on activities, including technology, art, music, drama, and writing.

6) *Ongoing Assessment of Emergent Literacy Behaviors* provides examples of how teachers might create and implement developmentally appropriate assessment procedures and how the information might be conveyed to parents.

The six programs include strategies for supporting emergent literacy in a variety of settings and with children representing various cultures, language proficiencies, and special needs; and integration of technology.

The programs will be broadcast from January through April 1998. Persons interested in registering for the class should call the ELIPSS office at 888/298-8602 or 309/298-1634. A textbook containing information for each program is required and is available from the Macomb Projects office.

Those who prefer to order videotapes of the broadcast may do so. Contact Project ELIPSS staff members for ordering information. Videotapes are also available of two ELIPSS programs broadcast this fall: *Science, Math, and Literacy...A Winning Combination* which examines the math and science-related skills and concepts appropriate

for inclusion in programs for preschool children, and *Science, Math, and Literacy: A Way of Life for Young Children*, which explores a variety of ways to provide hands-on activities in science and math that support children's growing interests and abilities in listening, speaking, writing, and reading. In each video, strategies are offered for integrating science and math with children's literature.

Company Offers Single Switch Software for IBM

Judy Lynn Software offers single switch IBM software for individuals with developmental delays and limited motor skills. The software is intended for individuals whose cognitive levels are from 9 months to 5 years.

Most programs, such as *Cause & Effect Carnival*, *Visual Tracking*, *Animated Toys*, and *Fundamental Concepts* target cause and effect skills and visual tracking skills. Others, such as *Introduction to Scanning*, *Switch Art*, and *True Friends*, also target scanning skills. Programs are activated by either a switch or a spacebar press. Prices range from \$20 - \$35.00

Judy Lynn Software also sells an adapter that allows you to connect the switch to the serial or joystick port in the back of the computer. The adapter is not designed to work with software programs from other companies.

Request a catalog by writing Judy Lynn Software, 278 Dunhams Corner Road, P.O. Box 373, East Brunswick, NJ 08816.

Create a Portfolio with *Kid Pix* SlideShow

by Judy Potter

A portfolio is a purposeful collection of a child's work documenting the child's efforts, products, and growth over time. They are practical and useful as reporting and planning tools. Portfolio data collection helps teachers come to know the child in depth.

By using the SlideShow feature of either *Kid Pix 2®* or *Kid Pix® Studio*, you can create an individual child technology portfolio. Select children's work that shows and celebrates growth. Ask children to select work to be placed into their portfolio. Add images to the portfolio at regular intervals throughout the school year.

A *Kid Pix®* SlideShow can consist of *Kid Pix®* pictures and scanned photographs saved in a *Photoshop™* PICT file. Add some special transition graphics and sound effects to each picture and let the show begin.

SlideShow Tools

Each van will show one slide of your slide show. Put as many as 99 vans together. Before you begin, put all the pictures you want to use together in one folder, so they will be easier to find.

If you want to change the order of

your slides, click on the slide and drag it to the place where you want it to be.

The "Pick a Picture" icon is on the left at the bottom of each van. Choose it to select the image to put into the selected moving van.

Click on a file's name to highlight it, then click on **Select**. The dialog box will go away and you'll see the picture in the van. Click on another van and follow the same process over again. If you want a full-screen preview of your slide, click twice on the van. Click again to end the preview.

The "Pick a Sound" icon looks like a musical note. Click once on the note to bring up the Pick a Sound screen. SlideShow comes with a set of sound effects and music. You can add one of these sounds by selecting the icon of the sound you want. If your system is equipped with a microphone, you can record your own sound for the slide show. Decide which sound you want, click **Select** to place the sound in the moving van.

The "Pick a Transition" icon is located at the bottom right on each van. A transition is a way to end the slide and go on to the next one. Click on the

Transition button, select a transition effect, click on **Select** to load it into the selected moving van.

SlideShow Controls

At the bottom of the SlideShow screen is a control panel. The controls include: the "Undo Guy," the "Firecracker," "Play," and "Play Looped." With these controls, edit and play your SlideShow any way you like. For more information, refer to the official *Kid Pix®* manual.

Using the SlideShows

Kid Pix slideshows provide teachers with a unique assessment and documentation tool. Children enjoy viewing the slide shows to revisit their artwork throughout the school year. The slideshows can be used at parent-teacher conferences, displayed at open houses, and given to families at the end of the school year.

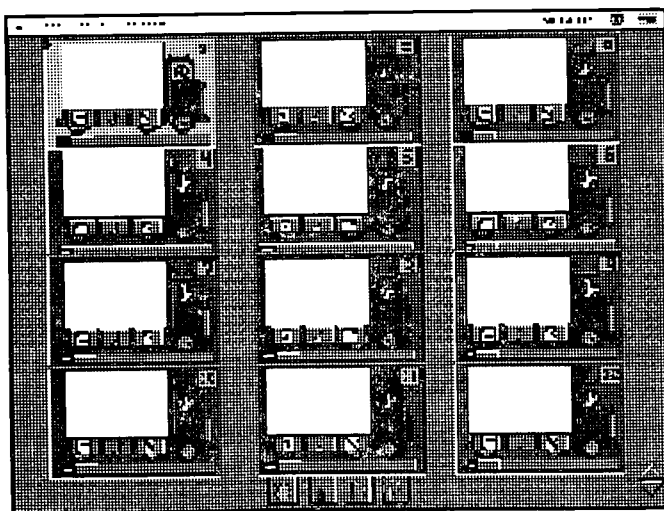
Kid Pix® is a registered trademark of Brøderbund Software, Inc. Adobe Photoshop is a trademark of Adobe Systems, Inc.

HyperStudio continued from page 8

how the materials fit into the design, and possible changes and revisions.

As children implement ideas, they assemble the pieces (e.g., sounds, images, video, links, animation, buttons, and transition effects) to make a whole. When they produce a *HyperStudio* stack, children are involved in creating and planning content, organizing cards, evaluating the aesthetic qualities of the stack, and suggesting necessary revisions.

HyperStudio is available for \$119.95 from Roger Wagner Publishing, Inc., 1050 Pioneer Way-Suite P, El Cajon, CA 92020. 800-HYPERSTUDIO; 619-442-0522 or (FAX) 619-442-0525.



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Supporting Diversity

Lessons in Bravery from Sheila Rae

by Letha Clark

Appreciating diversity involves more than recognizing that people come from different cultures and ethnic backgrounds. Each of us is unique in a variety of ways. Children need to learn to value their own uniqueness and appreciate the uniqueness of others. *Sheila Rae, the Brave* contributes to children's understanding of personality traits and how they affect ourselves and others.

Sheila Rae is very brave, and she knows it. She's afraid of nothing. She kisses spiders, growls at dogs, laughs at the darkness, eliminates scary closet monsters, and enjoys the light and sound show displayed by thunder and lightning. She's not intimidated by the school yard bully and rides her bike "no-handed." She is her sister Louise's protector. All this changes the afternoon Sheila Rae takes a new way home. She walks and walks, rounds corners and crosses streets, and realizes she has no idea where she is. Coincidentally she begins to hear strange and frightening sounds. No matter how many times she reminds herself she is brave and fearless, she remains unconvinced. She is alone, and she is lost. Always the brave one, always the leader—Sheila Rae suddenly finds herself vulnerable and out of her "safety zone." Sheila Rae comes to the startling realization that she doesn't like being alone and afraid. Her sister Louise appears and matter-of-factly informs Sheila Rae that *she* will lead the way home. A humbled Sheila Rae is ready to follow, and Louise bravely guides her home. As she puts her trust in her sister, Sheila Rae discovers how to follow as Louise learns to lead. Louise is brave and fearless, just like Sheila Rae.

Sheila Rae, the Brave may help children understand the subtle differences

in other children's personalities. Children might be brave and fearless on some days and on other days not be so brave and fearless. The software may cause them to realize that fearlessness varies from one child to the next and may lead to a discussion of other personality traits that make each person unique. Children may also begin to realize that letting another person lead is as important as the act of leading itself and that, sometimes, the only way to get where you need to go is to let someone else take you there.

Sheila Rae, the Brave is a Living Book by Brøderbund and can be purchased for about \$32 from sources such as Educational Resources (800/624-2926), The Edutainment Catalog (800/338-3844), and Quality Computers (800/777-3642).

NEW EARLY CHILDHOOD TECHNOLOGY CURRICULUM FOCUSES ON INTERACTIVITY

by Linda Robinson

Interactivity is the focus of *Building InterACTTive Futures*, the new Macomb Projects curriculum guide for integrating technology into early childhood programs. Based on ACTT's (Activating Children Through Technology) 1990 curriculum, this guide is a complete revision and update of content which includes learning environment, family participation, brand new sections on technology assessment, customization techniques, equipment and software information, and procedures for using specialized devices and creating off-computer materials.

All new curriculum activities with a new format and "user-friendly" design are included along with specific infor-

Kid Pix continued from page 5

Extended Activity

- Introduce *Art Space* to the children encouraging them to take a tour through the gallery and to stop at the studio to make their own creation.
- Use *Kid Pix Studio* to create a class slide show of children's computer drawings. Ask the children to help choose the drawings, transitions, sounds, and play length. Display the slide show in the art gallery to share with visitors and/or families at the grand opening.

Summary

Writing, talking, drawing, laughing, and creating all occur when a child interacts with *Kid Pix Studio*. Children can create a masterpiece and share it with a friend who is sitting beside them, with the whole class via a *Kid Pix SlideShow*, or with their family by printing the art and taking it home.

mation on designing and adapting activities for children birth to three years. Whether you are a computer novice or a tech expert this curriculum is sure to meet your early childhood needs.

Building InterACTTive Futures is available for \$55, which includes shipping and handling. Order a copy from Macomb Projects 27 Horrabin Hall, Western Illinois University, Macomb, Illinois 61455. Payment or purchase order must accompany your order. Purchase orders may be faxed to 309/298-2305 (attn: Vicki).

Visit the Macomb Projects' web site at www.mprojects.wiu.edu for the latest information on our technology products.

Curriculum ACTTivities



Low Tech Beanies!*

With the Beanie Baby™ craze in full swing, children may enjoy playing with home made bean bags. Bean bags are fun to use in any birth to three or preschool program. They can be easily made from any scrap material. To make them unique, you can capture an image from a favorite computer program or a photo of a child and print the graphic using T-shirt transfer paper.

Materials

- Scrap material
- Felt material
- Beans (or any type of filler for the bags)
- Canon T-shirt Transfer Paper (available from MacWarehouse)
- Macintosh computer system/early childhood software
- Color printer
- Iron/Iron board

Procedures

1. Cut squares of material that measure approximately 4 1/2" X 4 1/2."
2. To capture a symbol or icon from a favorite software program, using System 7.1 or higher, press *Command-Shift-3*. Boot the program from your computer system. You will actually hear a "click" similar to the sound a camera makes when it takes a picture. The captured image is saved as a "Picture" on the desktop. Each graphic file is named as "Picture 1," "Picture 2," and so on. The number of graphics you can capture depends on the memory availability of your computer. The graphic can then be opened in a program that handles graphics such as *ClarisWorks* (Claris Corporation). A photo of a child which has been taken with a digital camera could also be used. Remember, when using words (such as names), print the words backwards on the printer. Check *Page Setup*, go to *Options*, and select *Flip Horizontal*. This will print your image and words backwards for the heat transfer.
3. Print out the image with a color printer using T-shirt Transfer Paper.
4. Place the transfer face down onto the material and press with the hot iron.
5. Sew three sides of the bean bag.
6. Fill the bag with beans.
7. Securely sew the fourth side of the bean bag.

Variations of the bean bag would include sewing a noise maker such as a plastic squeaker or electronic musical movement box inside the bag. These are available from craft stores and cost from \$.69 to \$2.00 (depending on the song). A small amount of pressure would activate the plastic squeaker or music box. In this way the bean bags become great cause and effect toys for young children with physical disabilities.

Beanie Baby is a trademark of Ty Corporation.

Macomb Projects Introduces New Art Curriculum

Make your classroom come alive with art, music, movement, and dramatic play! *ArtExpress* is an innovative, yet practical guide to help teachers implement a comprehensive expressive arts curriculum. The 181-page curriculum includes adaptations for children with disabilities, tips for arranging the environment, family involvement ideas, and resources. Several sample activities and assessment tools are provided, along with examples of inexpensive low-tech adaptations and computer adaptations with peripherals.

ArtExpress is available from Macomb Projects for \$50.00 plus \$5.00 shipping and handling. Purchase orders may be faxed to 309/298-2305.

Join the *ArtExpress* Team for Training

Macomb Projects' *ArtExpress* Outreach project will offer training on March 16-18, 1998 at Western Illinois University. Topics include:

- using the *ArtExpress* Curriculum;
- developing arts activities;
- structuring the environment;
- making adaptive devices;
- using the computer as a tool for drawing, painting, and music; and
- using the developmental stages of children's art as an assessment tool.

Workshops on topics such as Adapting Peripherals, Integrating Expressive Arts into the Curriculum, and Assessing Children's Art are also available.

For more information about training or workshops, contact Amy Betz or Judy Potter at 27 Horrabin Hall, WIU, Macomb, IL 61455. Call 309/298-1634 or fax 309/298-2305.

Calendar of Conferences

December 10-13, 1997: TASH Annual Conference in Boston, MA. Contact 410/828-8274.

January 29 - 31, 1998: The 7th Symposium on Literacy and Disabilities in Research Triangle Park, NC. Contact The Center for Literacy & Disability Studies 919/684-3740.

February 18 - 22, 1998: 1998 Association for Educational Communications & Technology National Convention in St. Louis, MO. Contact AECT, 1025 Vermont Ave NW, Suite 820, Washington, DC 20005-3547.

February 23 - 25, 1998: Strategies for Building Supports for All. The 1998 Annual IL-TASH Conference in Oak Brook, IL. Contact Ruth Henning, 6S331 Cornwall, Naperville, IL 60540.

March 9-11, 1998: Midwest Education and Technology Conference in St. Louis, MO. Contact <http://info.csd.org>

March 8 - 11, 1998: 15th International Conference on Technology and Education in Santa Fe, NM. Find more information at www.icte.org

March 20, 1998: STARNET Early Childhood Technology Conference in Macomb, IL. Contact 309/298-1634.

April 15 - 19, 1998: CEC Annual Convention in Minneapolis, MN. Contact 800/486-5773 or cec@cec.sped.org or find information at www.cec.sped.org

May 11 - 12, 1998: TechSplosion '98 in Springfield, IL. Contact IATP at 217/522-7985.

June 26 - July 1, 1998: The State of the Arts and Science, RESNA '98 in Minneapolis, MN. Contact 703/524-6686 or 612/296-2771.

September 17 - 19, 1998: The Assistive Technology Conference '98 in Topeka, KS, sponsored by Assistive Technology for Kansans Project. Contact 800/500-1034, 913/272-1034 (fax) or capper@sound.net

New Sign Language CD-ROM

Just in time for the holidays the Texas School for the Deaf has produced *The Gift of the Magi*, which features the famous Christmas story by William Sydney Porter, known as O. Henry. Students of any age who are learning sign language will enjoy this program. Each page of the story is brought to life through ASL translations of the printed English text, sign language support for difficult vocabulary, comprehension questions, animated graphics, music, and voice-only support.

The Gift of the Magi features language-building activities along with the vocabulary and comprehension activities which are geared toward ESL learners and those who are deaf. Grammar activities focus on subject-verb agreement, identification of sentence fragments, and passive voice. The CD-ROM also contains teacher information and record-keeping features. *The Gift of the Magi* is available for \$34.95, plus \$6 shipping and handling, from the Texas School for the Deaf, 1102 South Congress Avenue, P.O. Box 3538, Austin, Texas 78764, or contact the CD-ROM Development Office at 512/462-5416 or 462-5353 (v/tdd), Fax 512-462-5313, or send e-mail to deniseh@tenet.edu.

Helpful Hint: Page Turners

If young children with disabilities are having problems turning pages of a book, try using the smallest size binder clips on the right side of the book's page.

ACTTive Technology Subscription Form

Name _____

Agency _____

Street Address _____

City _____ State _____ Zip _____

For a year's subscription to *ACTTive Technology*, complete this form and return it with a purchase order or check for \$16.00 to Macomb Projects, 27 Horrabin Hall, Western Illinois University, Macomb, IL 61455.

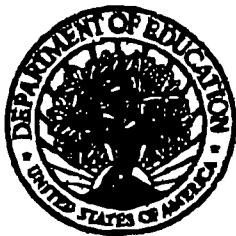
Orders from outside the U.S. must be paid for in U.S. funds drawn from U.S. banks.



Macomb Projects

College of Education and Human Services
27 Horrabin Hall
1 University Circle
Western Illinois University
Macomb, IL 61455 • 309/298-1634





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